

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*

FORM APPROVED  
OMB NO. 1040-0138  
Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO.

UTU-0140740

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

UTE TRIBE

7. UNIT AGREEMENT NAME

GYPSUM HILLS

8. FARM OR LEASE NAME, WELL NO.

GH 6MU-20-8-21

TYPE OF WORK

DRILL

DEEPEN

TYPE OF WELL

SINGLE

MULTIPLE

OIL WELL

GAS WELL

OTHER

ZONE

ZONE

2. NAME OF OPERATOR

QEP UINTA BASIN, INC.

Contact: Jan Nelson

E-Mail: jan.nelson@questar.com

3. ADDRESS

11002 E. 17500 S. Vernal, Ut 84078

Telephone number

Phone 435-781-4331 Fax 435-781-4323

9. API NUMBER:

43-047-38662

10. FIELD AND POOL, OR WILDCAT

GYPSUM HILLS

4. LOCATION OF WELL (Report location clearly and in accordance with and State requirements\*)

At Surface 620917X 1956' FNL 1688' FWL SENW SECTION 20 T8S R21E

At proposed production zone 4440775Y 40-110489 -109.581211

11. SEC., T, R, M, OR BLK & SURVEY OR AREA

SEC. 20, T8S, R21E Mer SLB

14. DISTANCE IN MILES FROM NEAREST TOWN OR POSTOFFICE\*

7 +/- - SOUTHEAST OF OURAY, UTAH

12. COUNTY OR PARISH

Uintah

13. STATE

UT

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (also to nearest drig, unit line if any)

1688' +/-

16. NO. OF ACRES IN LEASE

800.00

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

18. DISTANCE FROM PROPOSED location to nearest well, drilling, completed, applied for, on this lease, ft

19. PROPOSED DEPTH

11,725'

20. BLM/BIA Bond No. on file

ESB000024

21. ELEVATIONS (Show whether DF, RT, GR, ect.)

4680.8' GR

22. DATE WORK WILL START

ASAP

23. Estimated duration

10 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan
- A surface Use Plan (if location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

SIGNED

Name (printed/typed) Jan Nelson

DATE 9-18-06

TITLE

Regulatory Affairs

(This space for Federal or State office use)

PERMIT NO.

43-047-38662

APPROVAL DATE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

BRADLEY G. HILL  
ENVIRONMENTAL MANAGER

DATE

09-27-06

\*See Instructions On Reverse Side

Title 18 U.S.C Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

Federal Approval of this  
Action is Necessary

! CONFIDENTIAL

RECEIVED

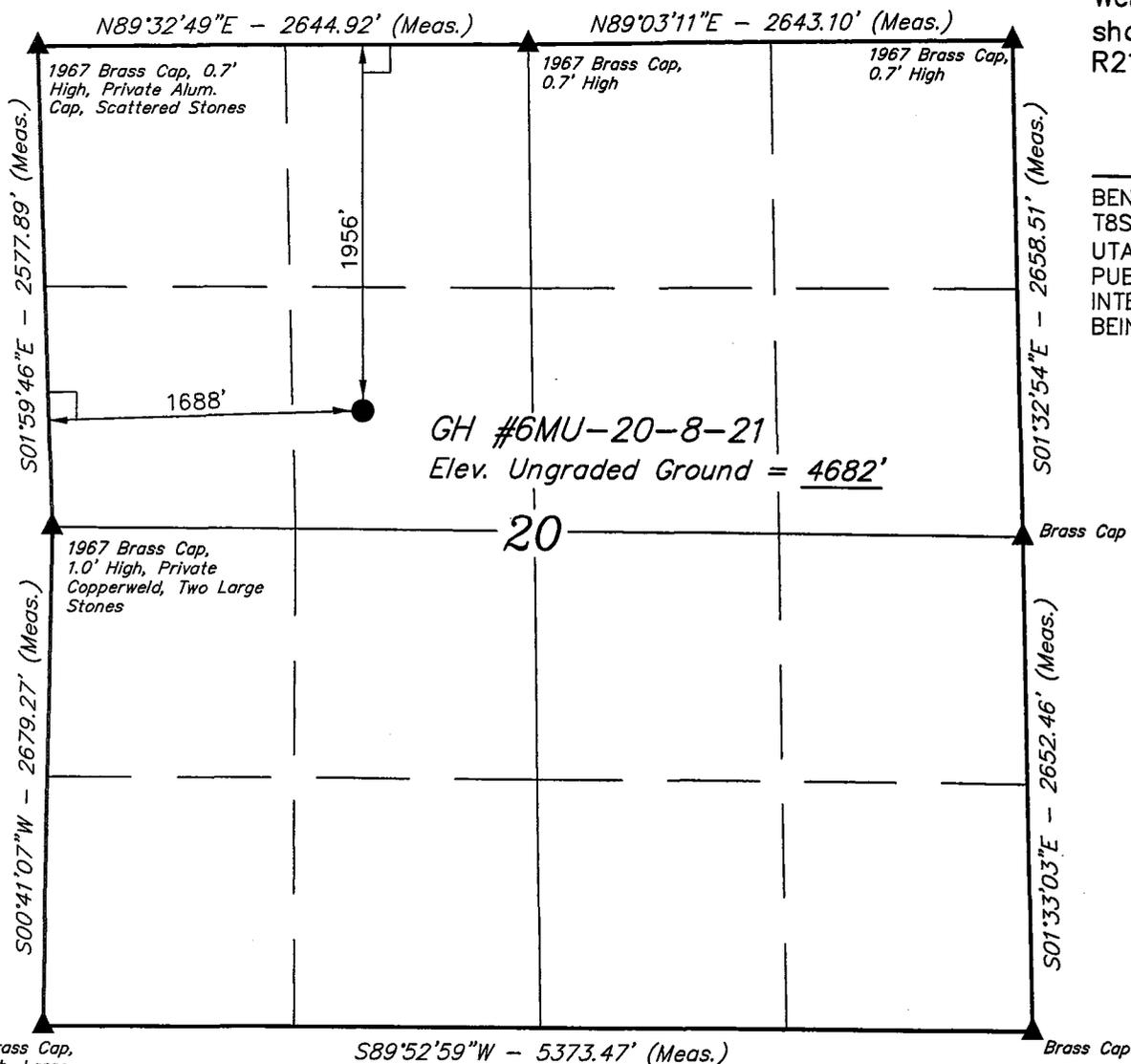
SEP 26 2006

DIV. OF OIL, GAS & MINING

# T8S, R21E, S.L.B.&M.

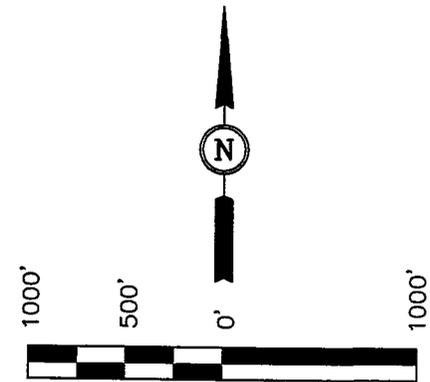
## QUESTAR EXPLR. & PROD.

Well location, GH #6MU-20-8-21, located as shown in the SE 1/4 NW 1/4 of Section 20, T8S, R21E, S.L.B.&M. Uintah County, Utah.



### BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.



REGISTERED LAND SURVEYOR  
 No. 161319  
 ROBERT L. KAY  
 STATE OF UTAH  
 REGISTERED SURVEYOR  
 REG. NO. 161319  
 STATE OF UTAH

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

(NAD 83)  
 LATITUDE = 40°06'37.69" (40.110469)  
 LONGITUDE = 109°34'53.88" (109.581633)  
 (NAD 27)  
 LATITUDE = 40°06'37.82" (40.110506)  
 LONGITUDE = 109°34'51.39" (109.580942)

### LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

**UINTAH ENGINEERING & LAND SURVEYING**  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 04-27-06	DATE DRAWN: 05-03-06
PARTY D.A. T.B. C.G.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE QUESTAR EXPLR. & PROD.	

### **Additional Operator Remarks**

QEP Uinta Basin, Inc. proposes to drill a well to 11,725' to test the MesaVerde. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements"

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

Please be advised that QEP Uinta Basin Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No.ESB000024. The principal is QEP Uinta Basin Inc. via surety as consent as provided for the 43 CFR 3104.2.

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1  
Approval of Operations on Onshore  
Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. **Formation Tops**

The estimated tops of important geologic markers are as follows:

<b><u>Formation</u></b>	<b><u>Depth, TVD</u></b>
Uinta	Surface
Green River	2,460'
Wasatch	5,971'
Mesaverde	9,225'
Sego	11,620'
TD	11,725'

2. **Anticipated Depths of Oil, Gas, Water and Other Mineral Bearing Zones**

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

<b><u>Substance</u></b>	<b><u>Formation</u></b>	<b><u>Depth, TVD</u></b>
Gas	Wasatch	5,971'
Gas	Mesaverde	9,225'

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right # A36125 (which was filed on May 7, 1964,) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at Red Wash

DRILLING PROGRAM

Central Battery Disposal Site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

**3. Operator's Specification for Pressure Control Equipment:**

- A. 5,000 psi W.P. Double Gate BOP, 5,000 psi annular (schematic attached)
- B. Functional test daily
- C. All casing strings shall be pressure tested (0.22 psi/foot or 1500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.
- D. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 50 percent of internal yield pressure of casing whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 5M system and individual components shall be operable as designed.

**4. Casing Program**

Hole Size	Casing Size	Top (MD)	Bottom (MD)	Weight	Grade	Thread	Cond.
20"	14"	surface	40'	Steel	Cond.	None	Used
12-1/4"	9-5/8"	surface	450'	36.0	J-55	STC	New
8-3/4"	7"	surface	7,800'	26.0	K-55	LTC	New
6-1/8"	4-1/2"	surface	11,725'	11.6	P-110	LTC	New

Casing Strengths:				Collapse	Burst	Tensile (minimum)
9-5/8"	36.0 lb.	J-55	STC	2,020 psi	3,520 psi	394,000 lb.
7"	26.0 lb.	J-55	LTC	4,320 psi	4,980 psi	367,000 lb.
4-1/2"	11.6 lb.	P-110	LTC	7,580 psi	10,690 psi	279,000 lb.

DRILLING PROGRAM

5. Auxiliary Equipment

- A. Kelly Cock – yes
- B. Float at the bit – no
- C. Monitoring equipment on the mud system – visually and/or PVT/Flow Show
- D. Full opening safety valve on the rig floor – yes
- E. Rotating Head – yes
- F. If drilling with air the following will be used:
- G. The blooie line shall be at least 6” in diameter and extend at least 100’ from the well bore into the reserve/blooie pit.
- H. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500’).
- I. Compressor shall be tied directly to the blooie line through a manifold.
- J. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

Surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below surface casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. It is not intended to use oil in the mud, however, in the event it is used, oil concentration will be less than 4% by volume. Maximum anticipated mud weight is 11.5 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

Gas detector will be used from surface casing depth to TD.

DRILLING PROGRAM

6. **Testing, logging and coring program**

- A. Cores – none anticipated
- B. DST – none anticipated
- C. Logging – Mud Logging – 1500' to TD  
GR-SP-Induction, Neutron Density
- D. Formation and Completion Interval: Green River/Wasatch/MesaVerde interval, final determination of completion will be made by analysis of logs.  
Stimulation: Stimulation will be designed for the particular area of interest as encountered.

7. **Cementing Program**

**14" Conductor:**

Cement to surface with construction cement.

**9-5/8" Surface Casing: sfc - 450' (MD)**

**Lead/Tail Slurry:** 0' – 450'. 240 sks (280 cu ft) Premium AG cement + 2% CaCl<sub>2</sub> + 0.25 lb/sk celloflake. Slurry wt: 15.8 ppg, Slurry-yield: 1.17 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 100% excess.

**7" Intermediate Casing: sfc - 7,800' (MD)**

**Lead Slurry:** 0' – 5,500'. 315 sks (1215 cu ft) Halliburton Hi-Fill cement. Slurry wt: 11.0 ppg, Slurry yield: 3.86 ft<sup>3</sup>/sk, Slurry volume: 8-3/4" hole + 50% excess in open hole section.

**Tail Slurry:** 5,500' – 7,800'. 420 sks (520 cu ft) of 50/50 Poz Premium AG + 2.0% Bentonite + 0.6% Halad (R)-322 fluid loss + 2.0% Microbond M expander + 5% salt + 0.25 lb/sk Flocele. Slurry wt: 14.35 ppg, Slurry yield: 1.24 ft<sup>3</sup>/sk, Slurry volume: 8-3/4" hole + 50% excess.

**4-1/2" Production Casing: sfc – 11,725' (MD)**

**Lead Slurry:** 0' - 5,500'. 150 sks (575 cu ft) Halliburton Hi-Fill cement + 16% Bentonite + 0.75% Econolite + 3% salt + 0.8% HR-7 retarder. Slurry wt: 11.0 ppg, Slurry yield: 3.84 ft<sup>3</sup>/sk, Slurry volume: 4-1/2" casing inside 7" casing.

**Tail Slurry:** 5,500' – 11,725'. 765 sks (950 cu ft) of 50/50 Poz Premium AG + 2.0% Bentonite + 0.6% Halad (R)-322 fluid loss + 2.0% Microbond M expander + 5% salt + 0.2% HR-5 retarder + 0.25 lb/sk Flocele. Slurry wt: 14.35 ppg, Slurry yield: 1.24 ft<sup>3</sup>/sk, Slurry volume: 6-1/8" hole + 20% excess in open hole section.

DRILLING PROGRAM

\*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

**8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards**

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 7010 psi. Maximum anticipated bottom hole temperature is 225° F.

5M BOP STACK

11" Rotating Head

11" Spacer Spool

11" 5M Annular

11" 5M Double Ram

11" 5M x 5M Multi-Bowl Head

9 5/8" 5M Casing Head

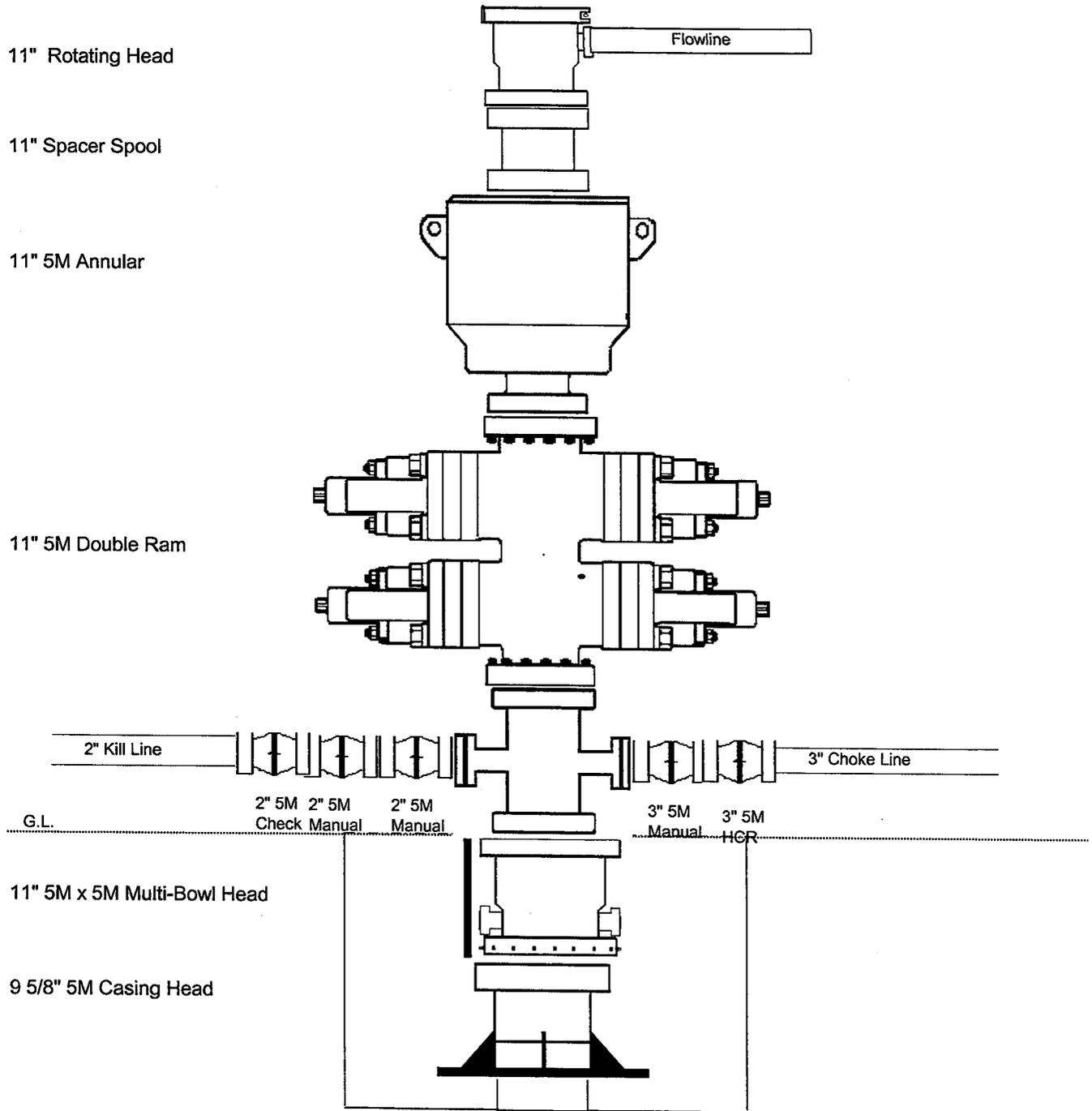
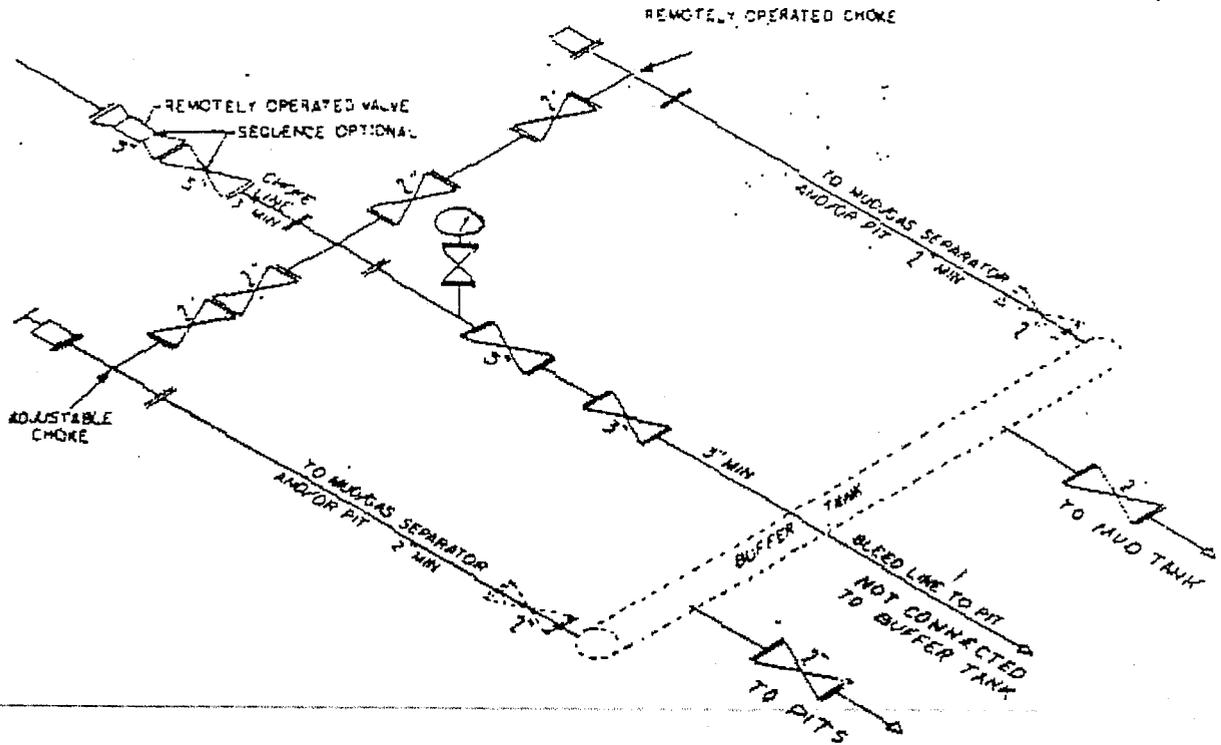


EXHIBIT B CONTINUED

Federal Register / Vol. 53, No. 221 / Friday, November 18, 1988 / Rules and Regulations

46813



② 5M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES MAY VARY

[FR Doc. 88-20738 Filed 11-17-88; 8:45 am]  
BILLING CODE 4210-04-C

**QEP UINTA BASIN, INC.  
GH 6MU-20-8-21  
1956' FNL 1688' FWL  
SENW, SECTION 20, T8S, R21E  
UINTAH COUNTY, UTAH  
LEASE # UTU-0140740**

**ONSHORE ORDER NO. 1**

**MULTI – POINT SURFACE USE & OPERATIONS PLAN**

**1. Existing Roads:**

The proposed well site is approximately 7 miles southeast of Ouray, Utah.

Refer to Topo Maps A and B for location of access roads within a 2 – mile radius.

There will be no improvements made to existing roads.

**2. Planned Access Roads:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

Refer to Topo Map B for the location of the proposed access road.

**3. Location of Existing Wells Within a 1 – Mile Radius:**

Please refer to Topo Map C.

**4. Location of Existing & Proposed Facilities:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

Refer to Topo Map D for the location of the proposed pipeline.

**5. Location and Type of Water Supply:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**6. Source of Construction Materials:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**7. Methods of Handling Waste Materials:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**8. Ancillary Facilities:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**9. Well Site Layout: (See Location Layout Diagram)**

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

A pit liner is required. A felt pit liner will be required if bedrock is encountered.

**10. Plans for Reclamation of the Surface:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**Interim Reclamation**

Please see attached Interim Reclamation plan.

Once the well is put onto production, QEP will reclaim as much of the well pad as possible that will allow for operations to continue in a safe and reasonable manner. Reseeding will be done in the spring or fall of every year to allow winter precipitation to aid in the success of reclamation.

**Seed Mix:**

*Interim Reclamation:*

6 lbs Hycrest Crested Wheatgrass

6 lbs Needle & Threadgrass

*Final Reclamation:*

Seed Mix # 1      3 lbs. Fourwing Saltbush, 3 lbs. Indian Rice Grass, 4 lbs. Hycrest Crested Wheat Grass,  
1 lb. Needle & Threadgrass

**11. Surface Ownership:**

The well pad and access road are located on lands owned by:

Ute Tribe

PO Box 70

FT. Duchesne, UT 84026

**12. Other Information**

A Class III archaeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted directly to the appropriate agencies by Montgomery Archaeology Consultants. Cultural resource clearance was recommended for this location.

**Lessee's or Operator's Representative:**

Jan Nelson  
Red Wash Rep.  
QEP Uinta Basin, Inc.  
11002 East 17500 South  
Vernal, Utah 84078  
(435) 781-4331

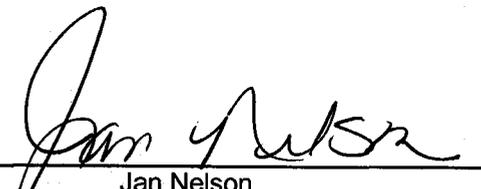
**Certification:**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil & Gas Orders, the approved plan of operations, and any applicable Notice to Lessees.

QEP Uinta Basin Inc. will be fully responsible for the actions of their subcontractors.

A complete copy of the approved Application for Permit to Drill will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by QEP Uinta Basin, Inc. its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

  
\_\_\_\_\_  
Jan Nelson  
Red Wash Representative

18-Sep-06  
\_\_\_\_\_  
Date

# QUESTAR EXPLR. & PROD.

GH #6MU-20-8-21

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 20, T8S, R21E, S.L.B.&M.

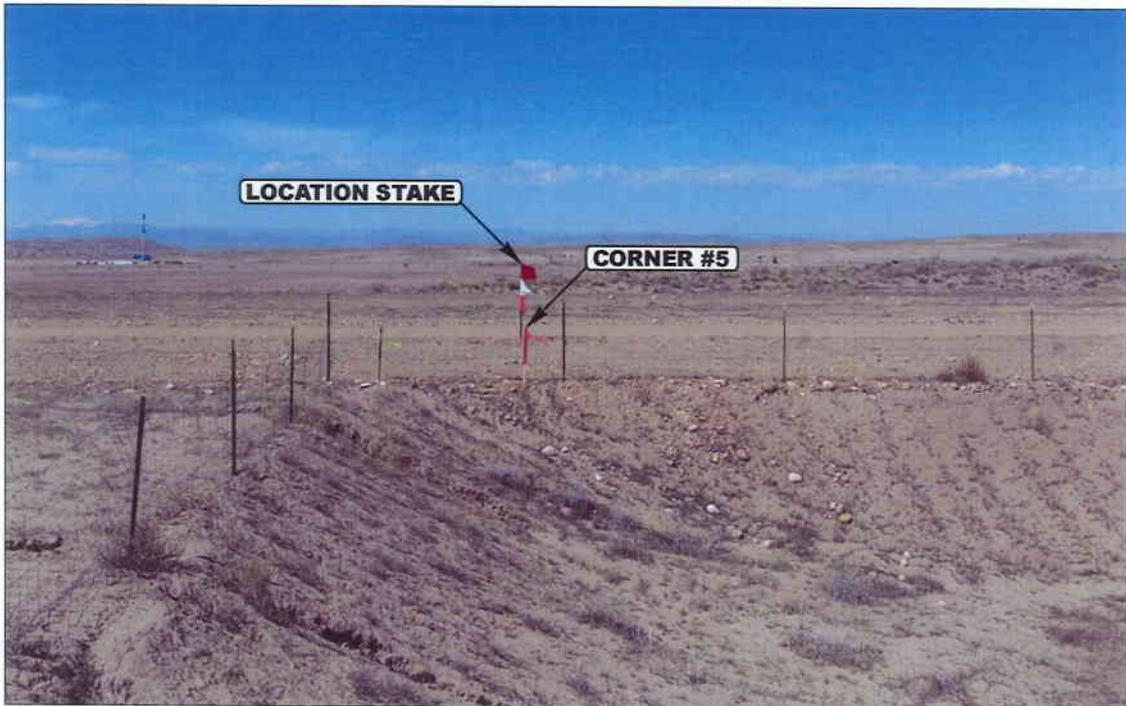


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY

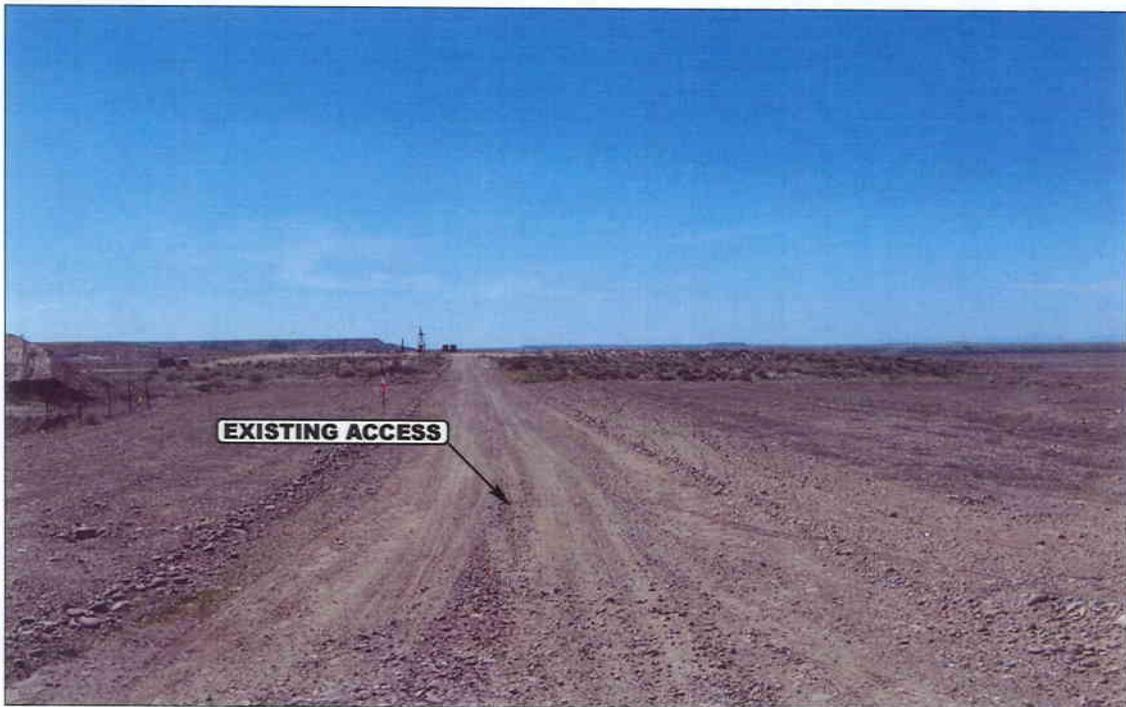


PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: EASTERLY



- Since 1964 -

Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

05 03 06  
MONTH DAY YEAR

PHOTO

TAKEN BY: D.A.

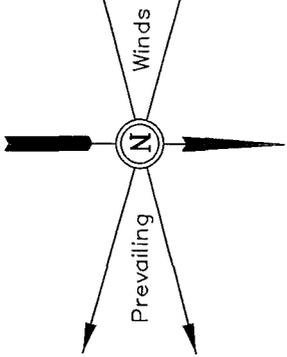
DRAWN BY: B.C.

REVISED: 00-00-00

QUESTAR EXPLR. & PROD.

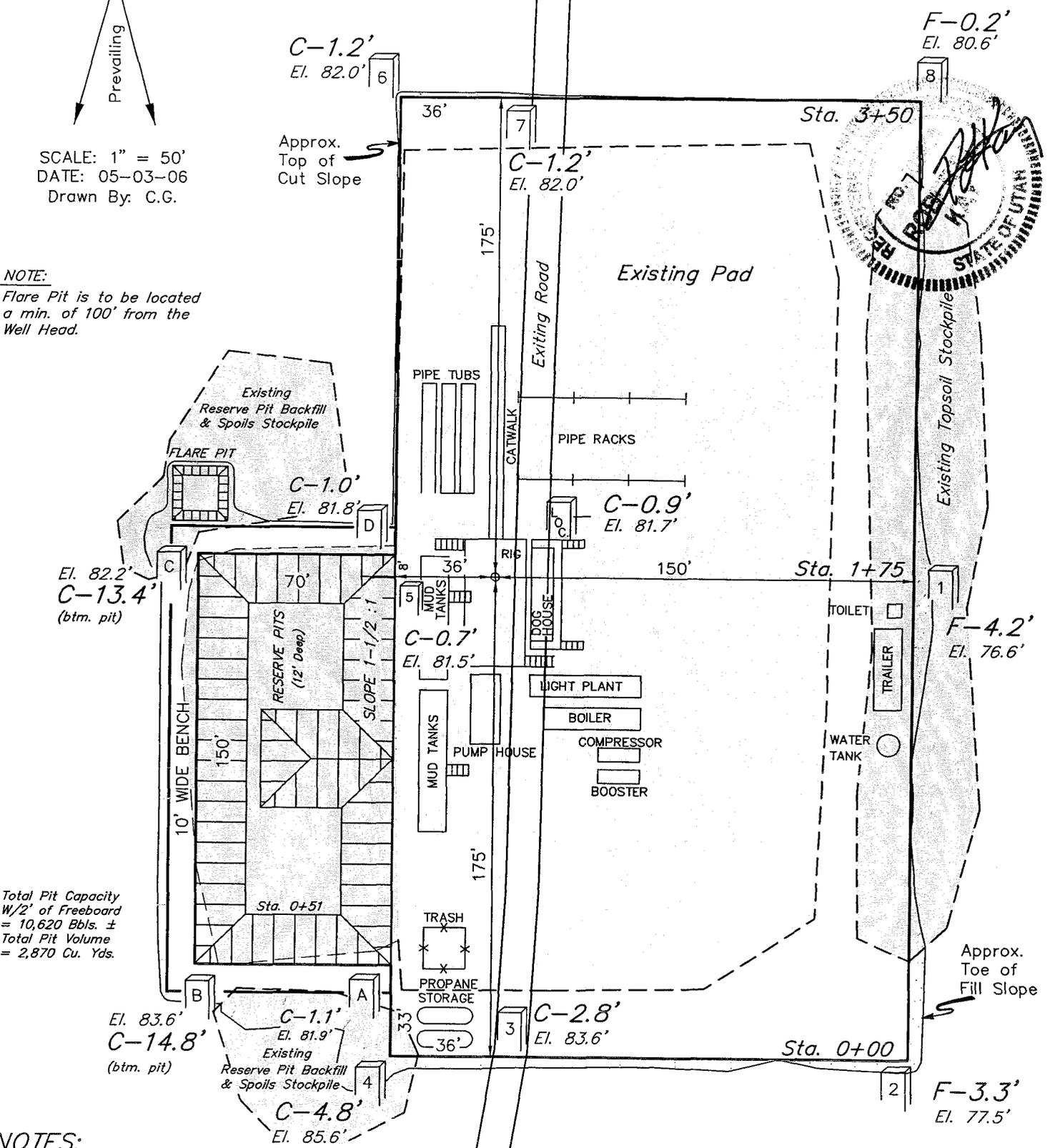
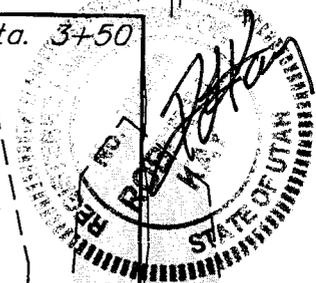
FIGURE #1

LOCATION LAYOUT FOR  
 GH #6MU-20-8-21  
 SECTION 20, T8S, R21E, S.L.B.&M.  
 1956' FNL 1688' FWL



SCALE: 1" = 50'  
 DATE: 05-03-06  
 Drawn By: C.G.

NOTE:  
 Flare Pit is to be located  
 a min. of 100' from the  
 Well Head.



Total Pit Capacity  
 W/2' of Freeboard  
 = 10,620 Bbls. ±  
 Total Pit Volume  
 = 2,870 Cu. Yds.

NOTES:

Elev. Ungraded Ground At Loc. Stake = 4681.7'  
 FINISHED GRADE ELEV. AT LOC. STAKE = 4680.8'

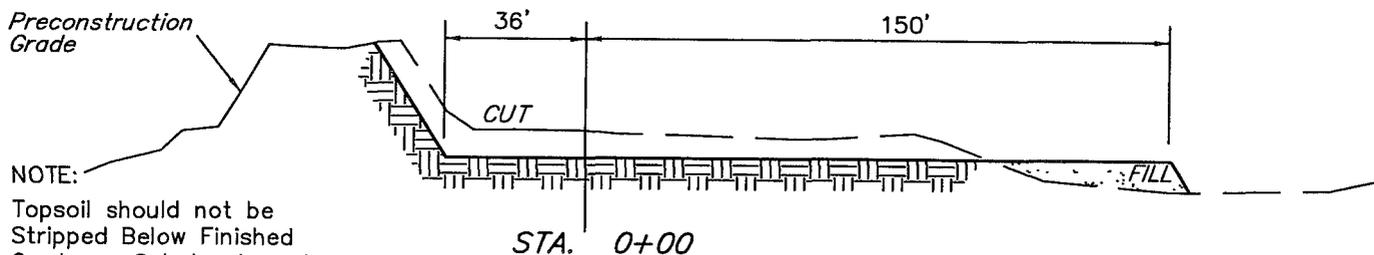
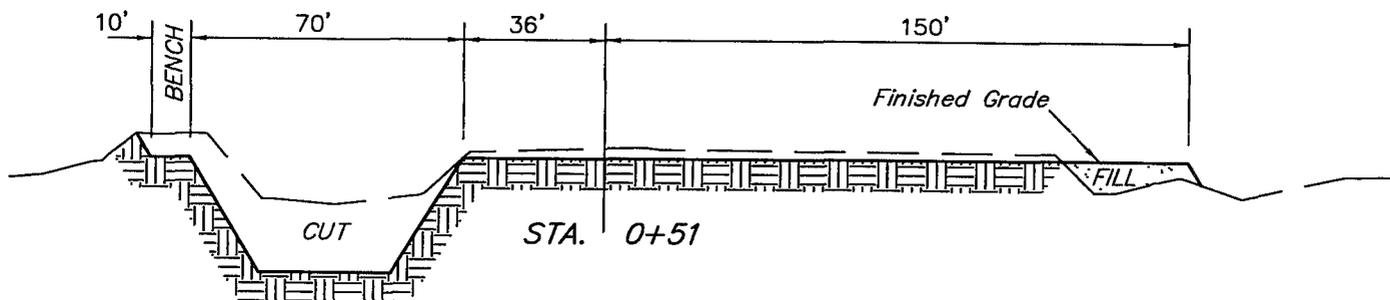
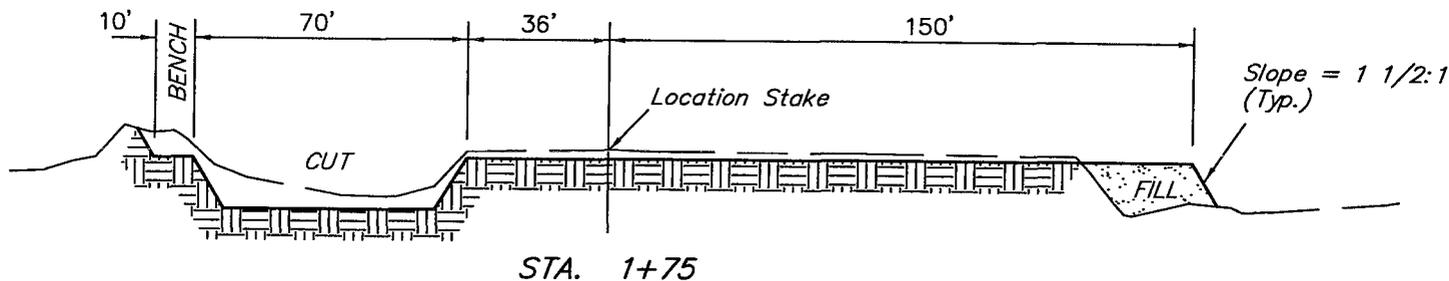
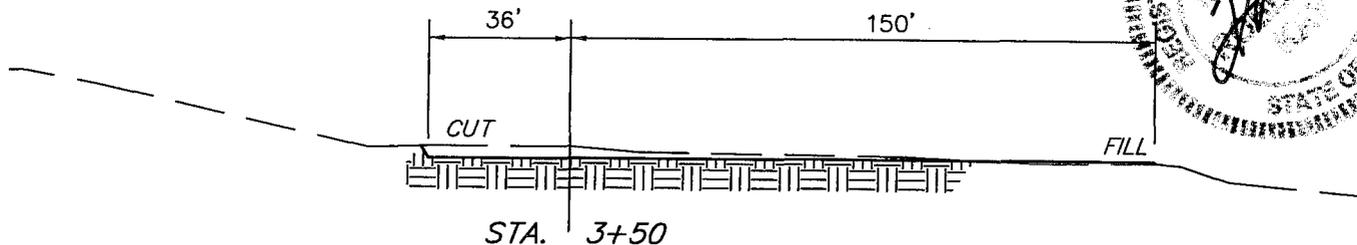
QUESTAR EXPLR. & PROD.

FIGURE #2

TYPICAL CROSS SECTIONS FOR  
 GH #6MU-20-8-21  
 SECTION 20, T8S, R21E, S.L.B.&M.  
 1956' FNL 1688' FWL

1" = 20'  
 X-Section  
 Scale  
 1" = 50'

DATE: 05-03-06  
 Drawn By: C.G.



NOTE:  
 Topsoil should not be Stripped Below Finished Grade on Substructure Area.

\* NOTE:  
 FILL QUANTITY INCLUDES 5% FOR COMPACTION  
 Excess Material = 1,780 Cu. Yds.  
 Topsoil & Pit Backfill = 1,780 Cu. Yds.  
 (1/2 Pit Vol.)  
 EXCESS UNBALANCE = 0 Cu. Yds.  
 (After Interim Rehabilitation)

APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 340 Cu. Yds.
(New Construction Only)	
Remaining Location	= 2,750 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 3,090 CU.YDS.</b>
<b>FILL</b>	<b>= 1,310 CU.YDS.</b>

QUESTAR EXPLR. & PROD.

FIGURE #3

INTERIM RECLAMATION PLAN FOR

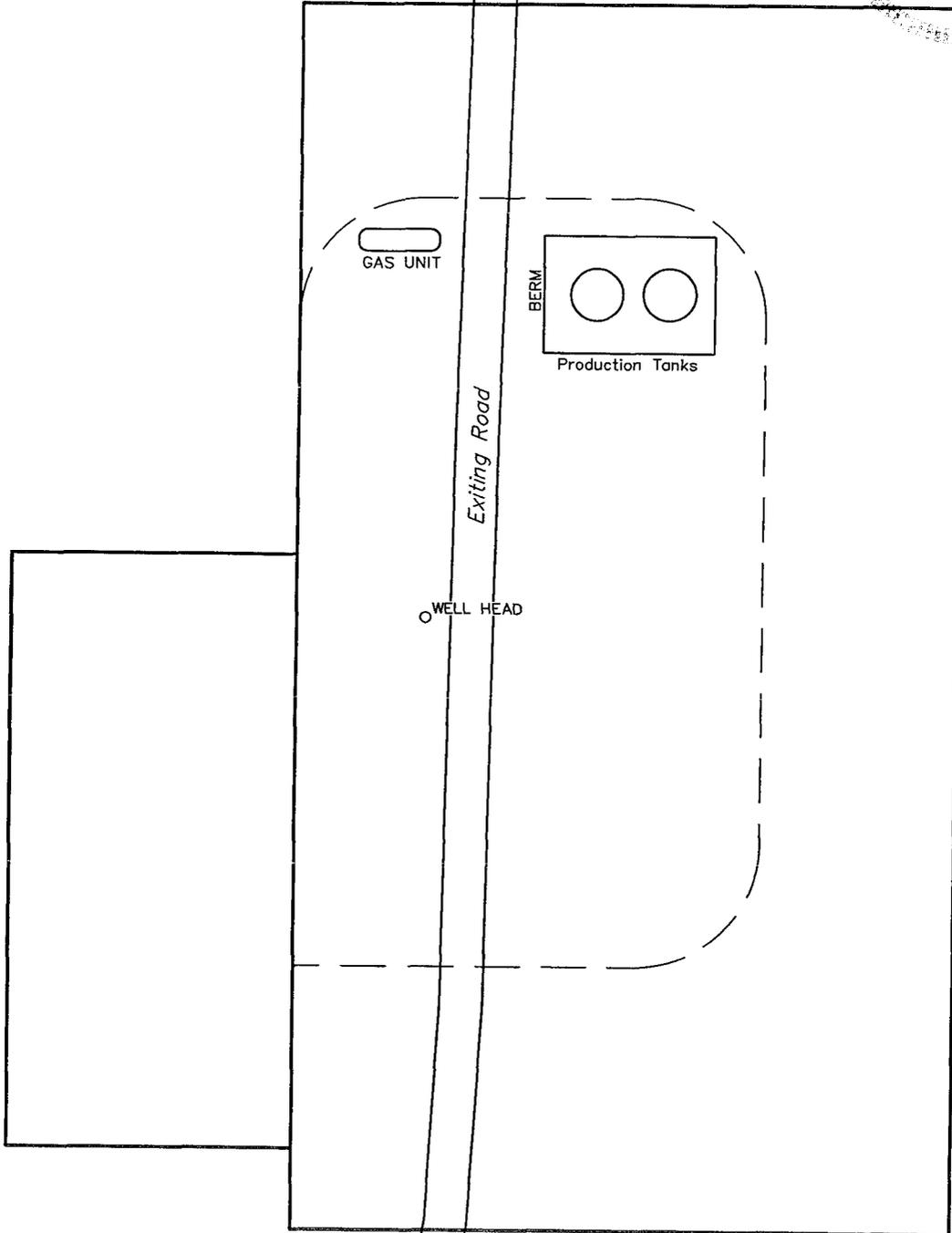
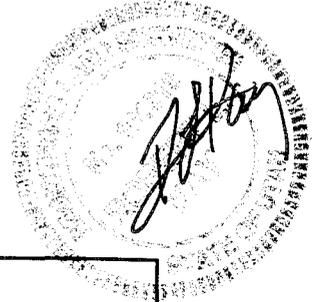
GH #6MU-20-8-21

SECTION 20, T8S, R21E, S.L.B.&M.

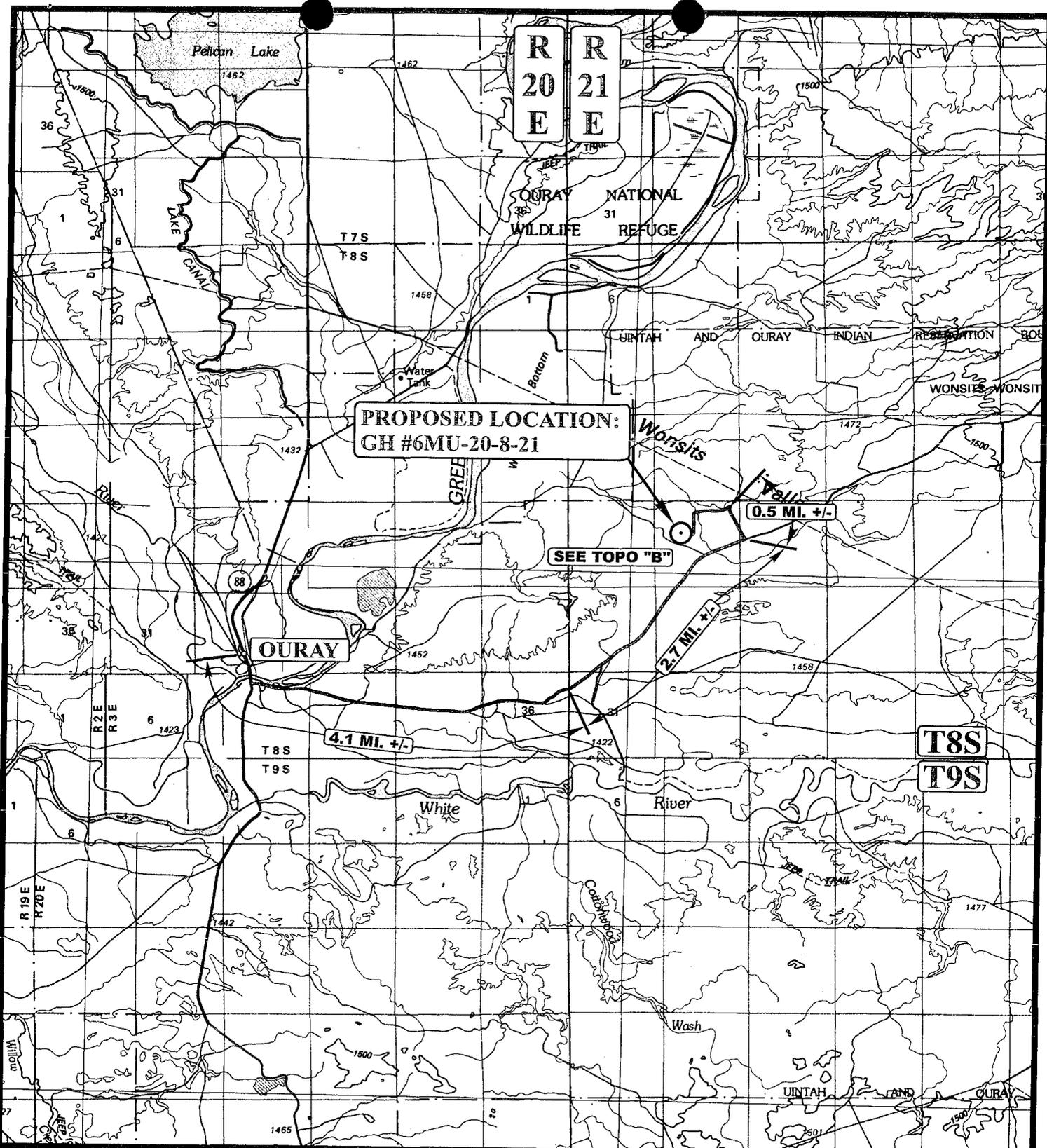
1956' FNL 1688' FWL



SCALE: 1" = 50'  
DATE: 05-03-06  
Drawn By: C.G.



INTERIM RECLAMATION



**PROPOSED LOCATION:  
GH #6MU-20-8-21**

**SEE TOPO "B"**

**0.5 MI. +/-**

**2.7 MI. +/-**

**4.1 MI. +/-**

**LEGEND:**

○ PROPOSED LOCATION



**QUESTAR EXPLR. & PROD.**

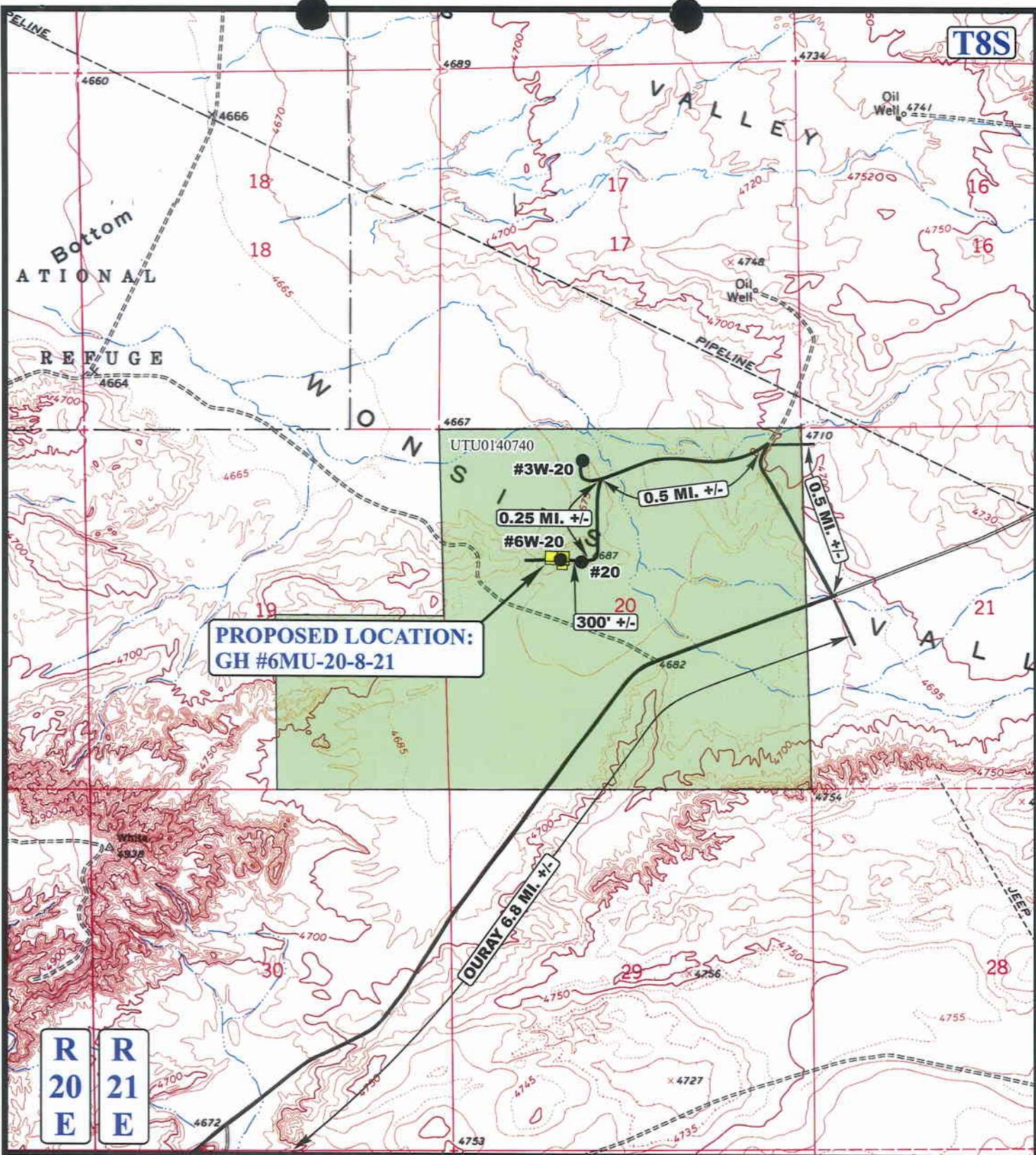
GH #6MU-20-8-21  
SECTION 20, T8S, R21E, S.L.B.&M.  
1956' FNL 1688' FWL



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC MAP  
05 03 06  
MONTH DAY YEAR  
SCALE: 1:100,000 DRAWN BY: B.C. [REVISED: 00-00-00]





**QUESTAR EXPLR. & PROD.**

**GH #6MU-20-8-21**  
**SECTION 20, T8S, R21E, S.L.B.&M.**  
**1956' FNL 1688' FWL**

**TOPOGRAPHIC MAP**  
**05 03 06**  
MONTH DAY YEAR  
**SCALE: 1" = 2000'** **DRAWN BY: B.C.** **REVISED: 00-00-00**

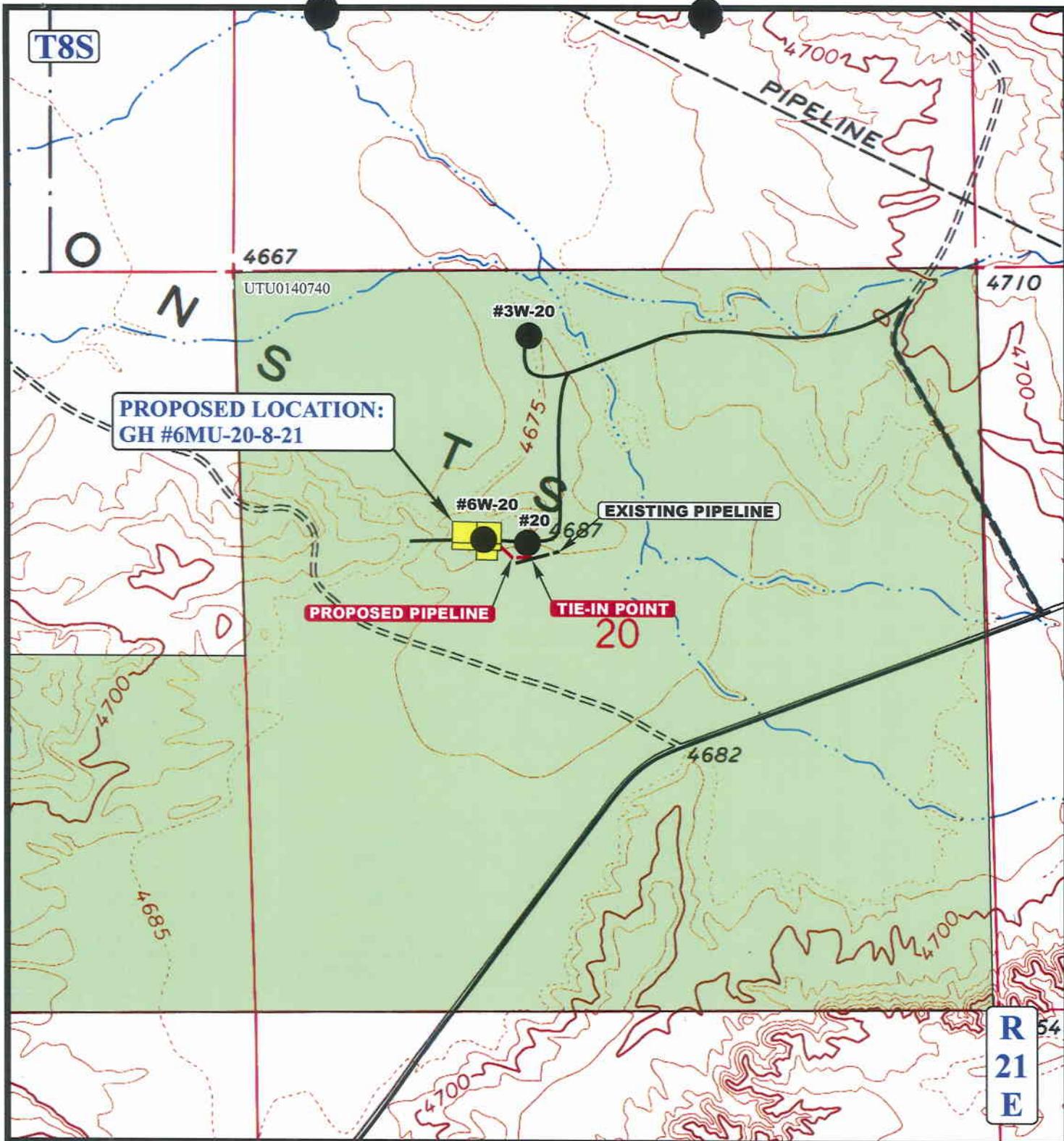


**U E I S**  
**Utah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



— EXISTING ROAD  
 - - - PROPOSED ACCESS ROAD





**APPROXIMATE TOTAL PIPELINE DISTANCE = 250' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE (SERVICING OTHER WELLS)



**QUESTAR EXPLR. & PROD.**

**GH #6MU-20-8-21**  
**SECTION 20, T8S, R21E, S.L.B.&M.**  
**1956' FNL 1688' FWL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC MAP** **05 03 06**  
 MONTH DAY YEAR  
 SCALE: 1" = 1000' DRAWN BY: B.C. REVISED: 00-00-00



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 09/26/2006

API NO. ASSIGNED: 43-047-38662

WELL NAME: GH 6MU-20-8-21

OPERATOR: QEP UINTA BASIN, INC. ( N2460 )

PHONE NUMBER: 435-781-4331

CONTACT: JAN NELSON

**PROPOSED LOCATION:**

SENW 20 080S 210E

SURFACE: 1956 FNL 1688 FWL

BOTTOM: 1956 FNL 1688 FWL

COUNTY: UINTAH

LATITUDE: 40.11049 LONGITUDE: -109.5812

UTM SURF EASTINGS: 620917 NORTHINGS: 4440775

FIELD NAME: GYPSUM HILLS ( 610 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-0140740

SURFACE OWNER: 2 - Indian

PROPOSED FORMATION: MVRD

COALBED METHANE WELL? NO

**RECEIVED AND/OR REVIEWED:**

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. ESB000024 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. 49-2153 )
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

**LOCATION AND SITING:**

- R649-2-3.
- Unit: GYPSUM HILLS (GREEN RIVER) *\* Non PM*
- R649-3-2. General
- Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: \_\_\_\_\_
- Eff Date: \_\_\_\_\_
- Siting: \_\_\_\_\_
- R649-3-11. Directional Drill

**COMMENTS:**

*Sop, Separate file*

**STIPULATIONS:**

- 1- Federal Approval*
- 2- Spacing Slip*



**QUESTAR****Questar Exploration and Production Company**

11002 East 17500 South

Vernal, UT 84078

Tel 435 781 4300 • Fax 435 781 4329

September 18, 2006

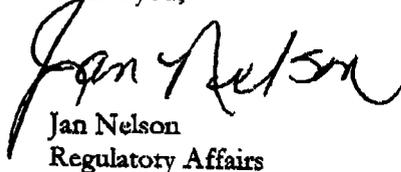
Division of Oil, Gas & Mining  
1594 W. N. Temple STE 1210  
Salt Lake City, UT 84114-5801

To Whom It May Concern:

QEP Uinta Basin, Inc. Gypsum Hills 6MU-20-8-21 Lease # UTU-0140740, is an exception location due to the General State Citing Rule of it being closer than 920' to the Gypsum Hills #20. QEP is considered to be the operator of the GH #20. The GH 6MU-20-8-21 was moved because of the location of the GH #20.

There are no additional lease owners within 460' of this proposed well. If you have any question please contact Jan Nelson @ (435) 781-4331.

Thank you,



Jan Nelson  
Regulatory Affairs

**RECEIVED****SEP 27 2006****DIV. OF OIL, GAS & MINING**



**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

September 27, 2006

QEP Uinta Basin, Inc.  
11002 E 17500 S  
Vernal, UT 84078

Re: Gypsum Hills 6MU-20-8-21 Well, 1956' FNL, 1688' FWL, SE NW, Sec. 20,  
T. 8 South, R. 21 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-38662.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal District Office

Operator: QEP Uinta Basin, Inc.  
Well Name & Number Gypsum Hills 6MU-20-8-21  
API Number: 43-047-38662  
Lease: UTU-0140740

Location: SE NW                      Sec. 20            T. 8 South                      R. 21 East

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

**Division of Oil, Gas and Mining**  
**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. DJJ
2. CDW

Change of Operator (Well Sold)

**X - Operator Name Change/Merger**

The operator of the well(s) listed below has changed, effective:

**1/1/2007**

<b>FROM: (Old Operator):</b> N2460-QEP Uinta Basin, Inc. 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 672-6900	<b>TO: ( New Operator):</b> N5085-Questar E&P Company 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 672-6900
---	--

CA No.		Unit:		GYPSUM HILLS UNIT				
WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED LISTS				*				

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 4/19/2007
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 4/16/2007
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 1/31/2005
- Is the new operator registered in the State of Utah: \_\_\_\_\_ Business Number: 764611-0143
- (R649-9-2) Waste Management Plan has been received on: IN PLACE
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: n/a
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 4/23/2007 BIA
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 4/23/2007
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: \_\_\_\_\_
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: \_\_\_\_\_

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 4/30/2007 and 5/15/2007
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 4/30/2007 and 5/15/2007
- Bond information entered in RBDMS on: 4/30/2007 and 5/15/2007
- Fee/State wells attached to bond in RBDMS on: 4/30/2007 and 5/15/2007
- Injection Projects to new operator in RBDMS on: 4/30/2007 and 5/15/2007
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 799446
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965003033
- The **FORMER** operator has requested a release of liability from their bond on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS: THIS IS A COMPANY NAME CHANGE.**

**SOME WELL NAMES HAVE BEEN CHANGED AS REQUESTED**

QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
GYPSUM HILLS UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
GYPSUM HILLS 3	GH 3	NENE	20	080S	210E	4304720002	5355	Federal	WI	A
GYPSUM HILLS 4	GH 4	SWSE	19	080S	210E	4304730028	5355	Federal	OW	P
GYPSUM HILLS 6	GH 6	NENW	20	080S	210E	4304730099	5251	Federal	WI	A
COSTAS FED 1-20-4B	GH 1-20	NESW	20	080S	210E	4304731006	5355	Federal	WI	A
WHITON FED 1-19-3C	GH 1-19	SESE	19	080S	210E	4304731065	5355	Federal	OW	P
COSTAS FED 2-20-3B	GH 2-20	NESE	20	080S	210E	4304731066	5355	Federal	WI	A
STAGECOACH FED 23-21	GH 23-21	NWSW	21	080S	210E	4304731541	5355	Federal	OW	P
COSTAS FED 3-21-1D	GH 3-21	SWNW	21	080S	210E	4304731604	5355	Federal	WI	A
COSTAS FED 4-21-1C	GH 4-21	SENE	21	080S	210E	4304731826	5355	Federal	OW	P
COSTAS FED 5-21-2C	GH 5-21	SENE	21	080S	210E	4304731827	5355	Federal	OW	P
SRU 8-I	GH 8-I	SWNE	20	080S	210E	4304731932	5355	Federal	WI	A
GYPSUM HILLS 9	GH 9	SENE	20	080S	210E	4304732304	5355	Federal	OW	P
GYPSUM HILLS 10	GH 10	NWSE	21	080S	210E	4304732306	5355	Federal	WI	A
GYPSUM HILLS 12	GH 12	NESE	19	080S	210E	4304732458	5355	Federal	WI	A
GYPSUM HILLS 11	GH 11	NWSE	20	080S	210E	4304732459	5355	Federal	OW	P
GYPSUM HILLS 13	GH 13	NESW	21	080S	210E	4304732460	5355	Federal	OW	P
GYPSUM HILLS 14	GH 13	NWSW	20	080S	210E	4304732647	5355	Federal	OW	P
GYPSUM HILLS 15	GH 15	SWSW	20	080S	210E	4304732648	5355	Federal	WI	A
GYPSUM HILLS 17	GH 17	SWSE	20	080S	210E	4304732649	5355	Federal	WI	A
GYPSUM HILLS 18	GH 18	SESE	20	080S	210E	4304732650	5355	Federal	OW	P
GYPSUM HILLS 19	GH 19	SWNW	20	080S	210E	4304732651	5355	Federal	OW	P
GYPSUM HILLS 20	GH 20	SENE	20	080S	210E	4304732652	5355	Federal	OW	P
GYPSUM HILLS 16	GH 16	SESW	20	080S	210E	4304732675	5355	Federal	OW	P
GHU 10W-19-8-21	GH 10W-19-8-21	NWSE	19	080S	210E	4304733528	12736	Federal	GW	P
GH 10G-19-8-21	GH 10G-19-8-21	NWSE	19	080S	210E	4304733566	5355	Federal	OW	P
WVFU 11W-17-8-21	WV 11W-17-8-20	NESW	17	080S	210E	4304733912	13228	Federal	GW	P
WV 5W-17-8-21	WV 5W-17-8-21	SWNW	17	080S	210E	4304733954	13332	Federal	GW	P
WV 7W-17-8-21	WV 7W-17-8-21	SWNE	17	080S	210E	4304733956	13330	Federal	GW	P
GH 9W-17-8-21	GH 9W-17-8-21	NESE	17	080S	210E	4304734150	13392	Federal	GW	P
GH 16W-17-8-21	GH 16W-17-8-21	SESE	17	080S	210E	4304734156	13354	Federal	GW	P
WV EXT 10W-17-8-21	WVX 10W-17-8-20	NWSE	17	080S	210E	4304734561	13744	Federal	GW	P
GH EXT 15W-17-8-21	GHX 15W-17-8-20	SWSE	17	080S	210E	4304734562	13674	Federal	GW	P
GYPSUM HILLS 13HG-17-8-21	GHX 13HG-17-8-21	SWSW	17	080S	210E	4304734723	5355	Federal	OW	S
GH 1G-17-8-21	GH 1G-17-8-21	NENE	17	080S	210E	4304734927	5355	Federal	OW	P
WV EXT 2W-17-8-21	WVX 2W-17-8-20	NWNE	17	080S	210E	4304734928	14253	Federal	GW	P
WV EXT 8W-17-8-21	WVX 8W-17-8-20	SENE	17	080S	210E	4304734929	13792	Federal	GW	P
GH 4MU-20-8-21	GH 4MU-20-8-21	NWNW	20	080S	210E	4304735068	14213	Federal	GW	P
GYPSUM HILLS 13MU-20-8-21	GH 13MU-20-8-20	SWSW	20	080S	210E	4304735070	14817	Federal	GW	P
GH 5W-20-8-21	GH 5W-20-8-21	SWNW	20	080S	210E	4304735097	14557	Federal	GW	P
WVX 3MU-17-8-21	WVX 3MU-17-8-21	NENW	17	080S	210E	4304735318	14113	Federal	GW	P
GH 15ML-18-8-21	GH 15ML-18-8-21	SWSE	18	080S	210E	4304735323	15483	Federal	GW	DRL

QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
GYPSUM HILLS UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
GH 1ML-19-8-21	GH 1ML-19-8-21	NENE	19	080S	210E	4304735324	14824	Federal	GW	P
GH 16W-19-8-21	GH 16W-19-8-21	SESE	19	080S	210E	4304735325	14823	Federal	GW	DRL
WVX 14MU-17-8-21	WVX 14MU-17-8-21	SESW	17	080S	210E	4304735369	14098	Federal	GW	P
WVX 12MU-17-8-21	WVX 12MU-17-8-21	NWSW	17	080S	210E	4304735370	15108	Federal	GW	P
WVX 8MU-19-8-21	WVX 8MU-19-8-21	SENE	19	080S	210E	4304735372	14241	Federal	GW	P
GH 10ML-18-8-21	GH 10ML-18-8-21	NWSE	18	080S	210E	4304735391	15482	Federal	GW	P
GH 8G-17-8-21	GH 8G-17-8-21	SENE	17	080S	210E	4304737992	5355	Federal	OW	DRL
GH 16G-17-8-21	GH 16G-17-8-21	SESE	17	080S	210E	4304737993	5355	Federal	OW	DRL
WVX 1MU-17-8-21	WVX 1MU-17-8-21	NENE	17	080S	210E	4304738156		Federal	GW	APD
GH 8MU-20-8-21	GH 8-20-8-21	SENE	20	080S	210E	4304738157		Federal	GW	APD
WVX 13MU-17-8-21	WVX 13MU-17-8-21	SWSW	17	080S	210E	4304738188		Federal	GW	APD
WVX 6MU-17-8-21	WVX 6MU-17-8-21	SENE	17	080S	210E	4304738189		Federal	GW	APD
WVX 4MU-17-8-21	WVX 4MU-17-8-21	NWNW	17	080S	210E	4304738190		Federal	GW	APD
WVX 16MU-18-8-21	WVX 16MU-18-8-21	SESE	18	080S	210E	4304738191		Federal	GW	APD
GH 2MU-19-8-21	GH 2MU-19-8-21	NWNE	19	080S	210E	4304738192		Federal	GW	APD
GH 3MU-19-8-21	GH 3MU-19-8-21	NENW	19	080S	210E	4304738250		Federal	GW	APD
GH 4MU-19-8-21	GH 4MU-19-8-21	NWNW	19	080S	210E	4304738264		Federal	GW	APD
GH 5MU-19-8-21	GH 5MU-19-8-21	SWNW	19	080S	210E	4304738265		Federal	GW	APD
GH 6MU-19-8-21	GH 6MU-19-8-21	SENE	19	080S	210E	4304738266		Federal	GW	APD
GH 7MU-19-8-21	GH 7D-19-8-21	SWNE	19	080S	210E	4304738267		Federal	GW	APD
GH 11MU-19-8-21	GH 11MU-19-8-21	NESW	19	080S	210E	4304738268		Federal	GW	APD
GH 12MU-19-8-21	GH 12MU-19-8-21	NWSW	19	080S	210E	4304738269		Federal	GW	APD
GH 15MU-19-8-21	GH 15MU-19-8-21	SWSE	19	080S	210E	4304738270		Federal	GW	APD
GH 14MU-19-8-21	GH 14MU-19-8-21	SESW	19	080S	210E	4304738472		Federal	GW	APD
WVX 1MU-18-8-21	WVX 1MU-18-8-21	NENE	18	080S	210E	4304738659		Federal	GW	APD
WVX 9MU-18-8-21	WVX 9MU-18-8-21	NESE	18	080S	210E	4304738660		Federal	GW	APD
WVX 8MU-18-8-21	GH 8G-18-8-21	SENE	18	080S	210E	4304738661		Federal	GW	APD
GH 6MU-20-8-21	GH 6-20-8-21	SENE	20	080S	210E	4304738662		Federal	GW	APD

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

<b>1. TYPE OF WELL</b> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: see attached
<b>2. NAME OF OPERATOR</b> QUESTAR EXPLORATION AND PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: see attached
<b>3. ADDRESS OF OPERATOR:</b> 1050 17th Street Suite 500 CITY Denver STATE CO ZIP 80265		7. UNIT or CA AGREEMENT NAME: see attached
<b>4. LOCATION OF WELL</b> FOOTAGES AT SURFACE: attached COUNTY: Uintah QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: STATE: UTAH		8. WELL NAME and NUMBER: see attached
		9. API NUMBER: attached
		10. FIELD AND POOL, OR WILDCAT:

**11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> (Submit in Duplicate) Approximate date work will start: <u>1/1/2007</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Operator Name Change</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

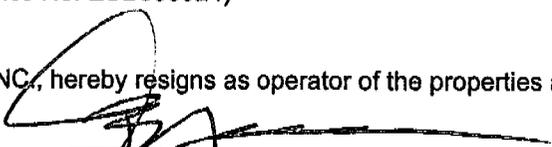
Effective January 1, 2007 operator of record, QEP Uinta Basin, Inc., will hereafter be known as QUESTAR EXPLORATION AND PRODUCTION COMPANY. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:

Federal Bond Number: 965002976 (BLM Reference No. ESB000024)

Utah State Bond Number: 965003033

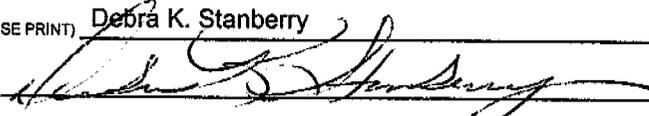
Fee Land Bond Number: 965003033

Current operator of record, QEP UINTA BASIN, INC., hereby resigns as operator of the properties as described on the attached list.

  
Jay B. Neese, Executive Vice President, QEP Uinta Basin, Inc.

Successor operator of record, QUESTAR EXPLORATION AND PRODUCTION COMPANY, hereby assumes all rights, duties and obligations as operator of the properties as described on the attached list

  
Jay B. Neese, Executive Vice President  
Questar Exploration and Production Company

NAME (PLEASE PRINT) <u>Debra K. Stanberry</u>	TITLE <u>Supervisor, Regulatory Affairs</u>
SIGNATURE 	DATE <u>3/16/2007</u>

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**APR 13 2007**

DIV. OF OIL, GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

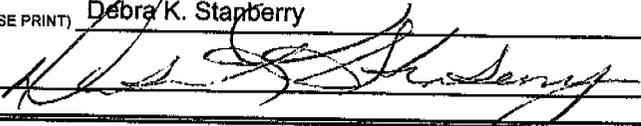
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: see attached
2. NAME OF OPERATOR: QUESTAR EXPLORATION AND PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: see attached
3. ADDRESS OF OPERATOR: 1050 17th Street Suite 500 City: Denver STATE: CO ZIP: 80265		7. UNIT or CA AGREEMENT NAME: see attached
4. LOCATION OF WELL FOOTAGES AT SURFACE: attached		8. WELL NAME and NUMBER: see attached
PHONE NUMBER: (303) 308-3068		9. API NUMBER: attached
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT:
COUNTY: Uintah		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>1/1/2007</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Well Name Changes</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

PER THE ATTACHED LIST OF WELLS, QUESTAR EXPLORATION AND PRODUCTION COMPANY REQUESTS THAT THE INDIVIDUAL WELL NAMES BE UPDATED IN YOUR RECORDS.

NAME (PLEASE PRINT) <u>Debra K. Stappberry</u>	TITLE <u>Supervisor, Regulatory Affairs</u>
SIGNATURE 	DATE <u>4/17/2007</u>

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DIV. OF OIL, GAS & MINING



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155



IN REPLY REFER TO  
3180  
UT-922

April 23, 2007

Questar Exploration and Production Company  
1050 17th Street, Suite 500  
Denver, Colorado 80265

Re: Gypsum Hills (GR) Unit  
Uintah County, Utah

Gentlemen:

On April 12, 2007, we received an indenture dated April 6, 2007, whereby QEP Uinta Basin, Inc. resigned as Unit Operator and Questar Exploration and Production Company was designated as Successor Unit Operator for the Gypsum Hills (GR) Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective April 23, 2007. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Gypsum Hills (GR) Unit Agreement.

Your nationwide oil and gas bond No. ESB000024 will be used to cover all federal operations within the Gypsum Hills (GR) Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Greg J. Noble

Greg J. Noble  
Acting Chief, Branch of Fluid Minerals

### Enclosure

bcc: Field Manager - Vernal (w/enclosure)  
SITLA  
Division of Oil, Gas & Mining  
File - Gypsum Hills (GR) Unit (w/enclosure)  
Agr. Sec. Chron  
Reading File  
Central Files

UT922:TAThompson:tt:4/23/07

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APR 30 2007

DIV. OF OIL, GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**CONFIDENTIAL**

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>UTU-0140740</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: <b>UTE TRIBE</b>
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME: <b>GYPSUM HILLS</b>
2. NAME OF OPERATOR: <b>QUESTAR EXPLORATION &amp; PRODUCTION CO.</b>		8. WELL NAME and NUMBER: <b>GH 6MU-20-8-21</b>
3. ADDRESS OF OPERATOR: <b>11002 E. 17500 S.</b> CITY <b>VERNAL</b> STATE <b>UT</b> ZIP <b>84078</b>		9. API NUMBER: <b>4304738662</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>1956' FNL 1688' FWL</b>		10. FIELD AND POOL, OR WILDCAT: <b>GYPSUM HILLS</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SENW 20 8S 21E</b>		COUNTY: <b>UINTAH</b>
		STATE: <b>UTAH</b>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u><b>APD EXTENSION</b></u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Questar Exploration & Production Co. hereby requests a 1 year extension on the GH 6MU-20-8-21.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 10-22-07  
By: [Signature]

10-3-07  
Rm

NAME (PLEASE PRINT) <u>Laura Bills</u>	TITLE <u>Regulatory Affairs</u>
SIGNATURE <u>[Signature]</u>	DATE <u>9/24/2007</u>

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OCT 01 2007

DIV. OF OIL, GAS & MINING

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-38662  
**Well Name:** GH 6MU-20-8-21  
**Location:** 1956' FNL 1688' FWL, SENW, SEC.20, T8S, R24E  
**Company Permit Issued to:** Questar Exploration & Production Co.  
**Date Original Permit Issued:** 9/27/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes  No

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes  No

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes  No

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes  No

Has the approved source of water for drilling changed? Yes  No

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes  No

Is bonding still in place, which covers this proposed well? Yes  No

  
Signature

9/24/2007  
Date

Title: REGULATORY AFFAIRS

Representing: Questar Exploration & Production Co.

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OCT 01 2007

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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SEP 21 2008

FORM APPROVED  
OMB NO. 1040-0136  
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		7. LEASE DESIGNATION AND SERIAL NO. UTU-0140740	
TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME UTE TRIBE	
2. NAME OF OPERATOR QEP UINTA BASIN, INC.		7. UNIT AGREEMENT NAME GYPSUM HILLS	
3. ADDRESS 11002 E. 17500 S. Vernal, Ut 84078		8. FARM OR LEASE NAME, WELL NO. GH 6MU-20-8-21	
4. LOCATION OF WELL (Report location clearly and in accordance with and State requirements*) At Surface 1956' FNL 1688' FWL SENW SECTION 20 T8S R21E At proposed production zone		9. API NUMBER: 43 047 38662	
14. DISTANCE IN MILES FROM NEAREST TOWN OR POSTOFFICE* 7 +/- - SOUTHEAST OF OURAY, UTAH		10. FIELD AND POOL, OR WILDCAT GYPSUM HILLS	
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (also to nearest drig, unit line if any) 1688' +/-		11. SEC., T, R, M, OR BLK & SURVEY OR AREA SEC. 20, T8S, R21E Mer SLB	
16. NO. OF ACRES IN LEASE 800.00		12. COUNTY OR PARISH Uintah	
18. DISTANCE FROM PROPOSED location to nearest well, drilling, completed, applied for, on this lease, ft		13. STATE UT	
21. ELEVATIONS (Show whether DF, RT, GR, ect.) 4680.8' GR		17. NO. OF ACRES ASSIGNED TO THIS WELL 40	
22. DATE WORK WILL START ASAP		20. BLM/BIA Bond No. on file ESB000024	
24. Attachments		23. Estimated duration 10 days	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan
- 3. A surface Use Plan ( if location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- 5. Operator certification.
- 6. Such other site specific information and/or plans as may be required by the authorized officer.

SIGNED Jan Nelson Name (printed/typed) Jan Nelson DATE 9-18-06

TITLE Regulatory Affairs

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY Wall Baker TITLE Acting Assistant Field Manager Lands & Mineral Resources

\*See Instructions On Reverse Side

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MAY 23 2008  
DATE 5/20/08  
DIV. OF OIL, GAS & MINING

Title 18 U.S.C Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

NOTICE OF APPROVAL

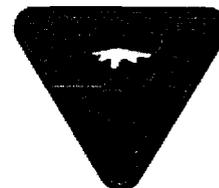


CONDITIONS OF APPROVAL ATTACHED



**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE**

**170 South 500 East      VERNAL, UT 84078      (435) 781-4400**



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

<b>Company:</b>	<b>Questar Exp. &amp; Prod., Inc.</b>	<b>Location:</b>	<b>SENW, Sec 20, T8S, R21E</b>
<b>Well No:</b>	<b>GH 6MU-20-8-21</b>	<b>Lease No:</b>	<b>UTU-0140740</b>
<b>API No:</b>	<b>43-047-38662</b>	<b>Agreement</b>	<b>Gypsum Hills Unit</b>

<b>Title</b>	<b>Name</b>	<b>Office Phone Number</b>	<b>Cell Phone Number</b>
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	
NRS/Enviro Scientist:	Chuck MacDonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	(435) 828-3546
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545

Fax: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Construction Activity	- The Ute Tribe Energy & Minerals Dept. shall be notified in writing 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion	- Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

***SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)***

***Surface COAs:***

General Conditions of Approval

- A 250' by 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations shall be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.

- All personnel shall refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department shall be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

ADDITIONAL Conditions of Approval

- Paint equipment DESERT TAN
- Culverts as needed. A 24" culvert is required for the access road.
- Rock and gravel roads and well pads

***DOWNHOLE CONDITIONS OF APPROVAL (COAs)***

**SITE SPECIFIC DOWNHOLE COAs:**

- Oil shall not be used in the water based mud system without prior approval. Written request for approval shall be required.
- Intermediate casing cement shall be brought up and into the surface.
- Production casing cement shall be brought up and into the intermediate casing. The minimum cement top is 200 ft above the intermediate casing shoe.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS  
DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.

- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to [UT\\_VN\\_Wellogs@BLM.gov](mailto:UT_VN_Wellogs@BLM.gov). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

**OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.
- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**CONFIDENTIAL**

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

5. Lease Serial No.

UTU-0140740

6. If Indian, Allottee or Tribe Name

UTE INDIAN TRIBE

7. If Unit or CA/Agreement, Name and/or No.

GYP SUM HILLS

8. Well Name and No.

GH 6MU-20-8-21

9. API Well No.

43-047-38662

10. Field and Pool, or Exploratory Area

WONSITS VALLEY

11. County or Parish, State

UINTAH

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

QUESTAR EXPLORATION & PRODUCTION, CO.

Contact: Jan Nelson

3a. Address

11002 E. 17500 S. VERNAL, UT 84078

3b. Phone No. (include area code)

435-781-4331

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1956' FNL 1688' FWL, SENW, SECTION 20, T8S, R21E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input checked="" type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other <u>NAME CHANGE</u>
	<input checked="" type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

QUESTAR EXPLORATION AND PRODUCTION COMPANY (QEP) REQUEST PERMISSION TO CHANGE THE DRILLING PLANS, INCREASE TOTAL DEPTH FROM 11,725' TO 17,183' FOR THIS WELL AND TO USE OIL BASE MUD FOR THE DRILLING OF THE FINAL SECTION OF THIS WELL TO IMPROVE DRILLING EFFICIENCY, WELLBORE STABILITY AND TO PROMOTE A GOOD CEMENT JOB OF THE PRODUCTION CASING. ATTACHED IS A DRILLING PLAN, WELLBORE DIAGRAM, DRILLING FLUID PROPOSAL AND A PROPOSAL FOR PROCESSING AND DISPOSAL OF THE OIL BASE MUD.

QEP IS REQUESTING TO CHANGE THE WELL NAME FROM GH 6MU-20-8-21 TO GH 6-20-8-21.

QUESTAR EXPLORATION & PRODUCTION COMPANY (QEP) WILL PROVIDE THE PROPER PAPER WORK TO THE BUREAU OF INDIAN AFFAIRS AND UTE TRIBE.

FOR TECHNICAL QUESTIONS, PLEASE CONTACT JIM DAVIDSON, CHIEF DRILLING ENGINEER FOR QEP, AT (303) 308-3090.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Jan Nelson

Signature

Title

Regulatory Affairs

Date

July 10, 2008

**THIS SPACE FOR FEDERAL OR STATE USE**

Approved by

Title

BRADLEY G. HILL  
ENVIRONMENTAL MANAGER

Date

07-17-08

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**RECEIVED**

JUL 15 2008

DIV. OF OIL, GAS & MINING

**CONFIDENTIAL**

**COPY SENT TO OPERATOR**

Date: 7-18-2008

Initials: JS

Federal Approval of this  
Action Is Necessary

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1  
Approval of Operations on Onshore  
Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

**1. Formation Tops**

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>
Uinta	Surface
Green River	2,558'
Wasatch	6,008'
Mesaverde	9,208'
Sego	11,656'
Castlegate	11,753'
Blackhawk	12,081'
Mancos Shale	12,537'
Mancos B	12,961'
Frontier	15,883'
Dakota Silt	16,614'
Dakota	16,783'
TD	17,183'

**2. Anticipated Depths of Oil Gas Water and Other Mineral Bearing Zones**

The estimated depths at which the top and bottom of the anticipated water, oil, gas. Or other mineral bearing formations are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Gas	Wasatch	6,008'
Gas	Mesaverde	9,208'
Gas	Blackhawk	12,081'
Gas	Mancos Shale	12,537'
Gas	Mancos B	12,961'
Gas	Dakota	16,983'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

DRILLING PROGRAM

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right # A36125 (which was filed on May 7, 1964,) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at Red Wash Central Battery Disposal Site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

3. **Operator's Specification for Pressure Control Equipment:**

- A. 13-5/8" 5000 psi double gate, 5,000 psi annular BOP (schematic included) from surface hole to 9-5/8" casing point. A 13-5/8" 10,000 psi double and single gate may be substituted based on contractor availability and substructure height of the drilling rig.
- B. 11" or 13-5/8" 10,000 psi double gate, 10,000 psi single gate, 10,000 psi annular BOP (schematic included) from 9-5/8" casing point to total depth. The choice of BOP stacks is based on the drilling contractor's availability.
- C. Functional test daily
- D. All casing strings shall be pressure tested (0.2 psi/foot or 1500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.
- E. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 50 percent of internal yield pressure of casing whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 10M system and individual components shall be operable as designed.

DRILLING PROGRAM

4. Casing Design:

Hole Size	Csg. Size	Top (MD)	Bottom (MD)	Mud Weight	Wt. lb/ft	Grade	Thread	Cond.
26"	20"	sfc	40-60'	N/A	Steel	Cond.	None	Used
17-1/2"	13-3/8"	sfc	500'	N/A	54.5	K-55	STC	New
12-1/4"	9-5/8"	sfc	5,408'	9.2	47	HCP-110	Flush Jnt **	New
8-1/2"	7"	Surface	9,000'		26	HCP-110	LTC	New
8-1/2"	7"	9000'	12,597'	13.5	29 SDrift *	HCP-110	LTC	New
6-1/8"	4-1/2"	sfc	13,000'		15.1	P-110	LTC	New
6-1/8"	4-1/2"	13,000'	15,000'		15.1	Q-125	LTC	New
6-1/8"	4-1/2"	15,000'	17,183'	15.1	16.6	Q-125	LTC	New

Casing Strengths:				Collapse	Burst	Tensile (minimum)
13-3/8"	54.5 lb.	K-55	STC	1,130 psi	2,730 psi	547,000 lb.
9-5/8"	47 lb.	HCP-110	LTC	7,100 psi	9,440 psi	1,213,000 lb.
7"	26 lb.	HCP-110	LTC	7,800 psi	9,950 psi	693,000 lb.
7"	29 lb.*	HCP-110	LTC	9,200 psi	11,220 psi	797,000 lb.
4-1/2"	15.1 lb.	P-110	LTC	14,350 psi	14,420 psi	406,000 lb.
4-1/2"	15.1 lb.	Q-125	LTC	15,840 psi	16,380 psi	438,000 lb.
4-1/2"	16.6 lb.	Q-125	LTC	19,010 psi	18,130 psi	493,000 lb.

\* Special Drift

\*\* Flush Jnt – VAM SLIJ II or LT&C based on availability

**MINIMUM DESIGN FACTORS:**

COLLAPSE: 1.125  
 BURST: 1.10  
 TENSION: 1.80

DRILLING PROGRAM

Area Fracture Gradient: 0.9 psi/foot  
Maximum anticipated mud weight: 14.8 ppg  
Maximum surface treating pressure: 12,500 psi

5. **Cementing Program**

**20" Conductor:**

Cement to surface with construction cement.

**13-3/8" Surface Casing: sfc – 500' (MD)**

**Slurry:** 0' – 500'. 610 sxs (731 cu ft) Premium cement + 0.25 lbs/sk Flocele + 2% CaCl<sub>2</sub>.  
Slurry wt: 15.6 ppg, slurry yield: 1.20 ft<sup>3</sup>/sx, slurry volume: 17-1/2" hole + 100% excess.

**9-5/8" Intermediate Casing: sfc – 5,408' (MD)**

**Lead Slurry:** 0' – 4,908'. 1411 sks (370 bbls) Foamed Lead 50/50 Poz cement + 0.1 % FDP-C766-05 (Low Fluid Loss Control) + 5 #/sx Silicate Compacted + 20 % SSA-1 + 0.1 % Versaset + 1.5 % Zonesealant 2000 (foamer) Slurry wt: 14.3 ppg, (unfoamed) or 11.0 ppg (foamed). Slurry yield: 1.47 ft<sup>3</sup>/sk (unfoamed), Slurry volume: 12-1/4" hole + 35% excess.

**Tail Slurry:** 4,908' – 5,408'. 115 sks (30 bbls) Tail 50/50 Poz cement + 0.1 % FDP-C766-05 (Low Fluid Loss Control) + 5 #/sx Silicate Compacted + 20 % SSA-1 + 0.1 % Versaset. Slurry wt: 14.3 ppg, Slurry yield: 1.47 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 35% excess.

**7" Intermediate Casing: sfc - 12,597' (MD)**

**Foamed Lead Slurry 2:** 0' – 12,097'. 1662 sks (2444 cu ft) 0.1% HALAD-766 (Low Fluid Loss Control); Slurry Yield: 1.47 ft<sup>3</sup>/sk; 5 lbm/sk Silicalite Compacted (Light Weight Additive) Total Mixing Fluid: 6.40 Gal/sk; 20 % SSA-1 (Heavy Weight Additive); 0.1 % Versaset (Thixotropic Additive); 1.5 % FDP-C760-04 (Foamer) 35% excess.

**Tail Slurry:** 12,097' – 12,597'. 60 sks (79.3 cu ft) 0.1% HALAD-766 (Low Fluid Loss Control) Slurry Yield: 1.47 ft<sup>3</sup>/sk; 5 lbm/sk Silicalite Compacted (Light Weight Additive) Total Mixing Fluid: 6.40 Gal/sk; 20 % SSA-1 (Heavy Weight Additive); 0.1% Versaset (Thixotropic Additive); 1.5% FDP-C760-04 (Foamer).

**4-1/2" Production Casing: sfc - 17,183' (MD)**

**Lead/Tail Slurry:** 6,000' - 17,183'. 942 sks (1402 cu ft) Premium Cement + 17.5% SSA-1, + 4% Microbond HT, + 0.2% Halad 344 + 0.5% Halad 413, + 0.3% CFR-3, + 0.9% HR-12, + 0.2% Super CBL, + 0.2% Suspend HT, 17.5% SSA-2. Slurry wt: 16.2 ppg, Slurry yield: 1.49 ft<sup>3</sup>/sk, Slurry volume: 6-1/8" hole + 35% in open hole section.

\*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface on the intermediate strings and 6,000' on the production string. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

DRILLING PROGRAM

6. Auxiliary Equipment

- A. Kelly Cock – yes
- B. Float at the bit – yes
- C. Monitoring equipment on the mud system – visually and/or PVT/Flow Show
- D. Full opening safety valve on the rig floor – yes
- E. Rotating Head – yes  
If drilling with air the following will be used:
- F. Request for Variance

Drilling surface hole with air:

A variance from 43 CFR 3160 Onshore Oil and Gas Order #2, Section III Requirements, subsection E. Special Drilling Operations is requested for the specific operation of drilling and setting surface casing on the subject well with a truck mounted air rig. The variance from the following requirements of Order #2 is requested because surface casing depth for this well is 500 feet and high pressures are not expected.

1. **Properly lubricated and maintained rotating head** – A diverter system in place of a rotating head. The diverter system forces the air and cutting returns to the reserve pit and is used to drill the surface casing.
2. **Blooiie line discharge 100 feet from wellbore and securely anchored** – the blooiie line discharge for this operation will be located 50 to 70 feet from the wellhead. This reduced length is necessary due to the smaller location size to minimize surface disturbance.
3. **Automatic ignitor or continuous pilot light on blooiie line** – a diffuser will be used rather than an automatic pilot/ignitor. Water is injected into the compressed air and eliminates the need for a pilot light and the need for dust suppression equipment.
4. **Compressors located in the opposite direction from the blooiie line a minimum of 100 feet from the wellbore** – compressors located within 50 feet on the opposite side of the wellbore from the blooiie line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.
5. **Kill Fluid to control well** – In lieu of having mud products on location to kill the well for an unanticipated kick, Questar will kill the well with water contained in a

## DRILLING PROGRAM

400 bbl tank on site. The 400 bbl water tank will also be storage for surface casing cement water.

6. **Deflector on the end of the blooie line** – Questar will mount a deflector unit at the end of the blooie line for the purpose of changing the direction and velocity of the air and cuttings flow into the reserve pit. Changing the velocity and direction of the cuttings and air will preserve the pit liner. In the event the deflector washes out due to erosion caused by the sand blasting effect of the cuttings, there will be no problem because the deflector is mounted on the very end of the blooie. A washed out deflector will be easily replaced.
  7. **Flare Pit** – there will be no need of a flare pit during the surface hole air drilling operation because the blooie line is routed directly to the reserve pit. When the big rig arrives for the main drilling after setting surface casing, a flare box will be installed and all flare lines will be routed to the flare box.
- G. All other operations and equipment for air/gas drilling shall meet specifications in Onshore Order #2, Section III Requirements, subsection E. Special Drilling Operations and Onshore Order #1.

Surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Intermediate holes will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. The production hole will be drilled with oil base mud (OBM). No chromates will be used. Maximum anticipated mud weight is 14.8 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

Gas detector will be used from surface casing depth to TD.

### 7. **Testing, logging and coring program**

- A. Cores – none anticipated
- B. DST – none anticipated
- C. Logging – Mud logging – 2500' to TD  
GR-SP-Induction, Neutron Density, FMI
- D. Formation and Completion Interval: Mancos interval, final determination of completion will be made by analysis of logs.  
Stimulation – Stimulation will be designed for the particular area of interest as encountered.

DRILLING PROGRAM

**8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards**

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 13,000 psi. Maximum anticipated bottom hole temperature is 310° F.

**9. Additional Information For Oil Base Mud**

A. See attached diagram of well pad layout. A reserve pit will be constructed for this location. This pit will be constructed so that a minimum of two vertical feet of freeboard exists above the top of the pit at all times and at least one-half of the holding capacity will be below ground level. The pit will be lined with a synthetic reinforced liner, 30 millimeters thick, with sufficient bedding used to cover any rocks prior to putting any fluids into the pit. The pad will be designed so that runoff from adjacent slopes does not flow into the reserve pit. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. At the beginning of drilling operations this reserve pit will have an open-ended dike placed in the pit that allows the fluids to migrate from one side of the pit to the other during the drilling of the surface and intermediate hole using water based mud. At the time that operations begin to drill the production hole with oil base mud, this dike will be extended, dividing the pit into two distinct, isolated halves allowing no migration of fluids from one side to the other. At that time all fluids will be removed from the end of the pit to be used as a cuttings pit. This cuttings pit will be used for oil based cuttings generated during drilling of the production hole.

B. Oil-base mud will be mixed in the closed circulating system and transferred to four 500-bbl tanks on location for storage prior to and after drilling operations. Drip pans will be installed below the rotary beams on the substructure and can be viewed on site from the cellar area. As the production section of the hole is drilled, the cuttings transported to the surface with the drilling fluid will be mechanically separated from the drilling fluid as waste by two shale-shakers and then cleaned/dried via a mud cleaner and/or centrifuge. These separated cuttings will be transferred to the cuttings pit nearest the shakers and stored in this cuttings pit for solidification after the rig is released and moved off location.

C. The means to transport the cuttings from the solids control equipment to the OBM cuttings pit will be by 10" PVC pipe or equivalent steel piping. Water will be pumped to the solids control equipment and will convey the OBM cuttings from the solids

## DRILLING PROGRAM

control equipment to the OBM cuttings pit via the PVC pipe. The water will be recycled multiple times from the cuttings pit to continue to transport the cuttings to the cuttings pit. The conveyance system will be enclosed on the solids control end to prevent spills. The conveyance piping system at the cuttings pit end will be placed on top of pit liner to eliminate absorption of fluids into the soil.

- D.** Plastic material will underlay the rig, oil base mud/diesel storage tanks and mud pits. All tanks on location will be placed inside of berms. Any oily waste fluids and sediments generated at the work site during drilling operations or when cleaning the fluid containment system after drilling will also be placed into the cuttings half of the pit.
- E.** All rig ditches will be lined and directed to a lined sump for fluid recovery. A drip pan will be installed on the BOP stack, a mud bucket will be utilized as needed on connections and a vacuum system will be used on the rig floor for fluid recovery in those areas.
- F.** Once all waste has been placed in the cuttings portion of the pit and all necessary approvals obtained, the oilfield waste management consultant Soli-Bond or a similar company will mobilize equipment and personnel to the site to perform the cement based solidification/stabilization process in-situ for encapsulation. Soil will be backfilled over the processed material used on the cuttings side of the pit and that portion of the pit area will be returned to the existing grade bordering the pit. Please see the attached Soli-Bond Proposal for Processing and Disposal of Drilling Waste for specific details. The half of the reserve pit containing water base materials will be left to evaporate and will be closed and reclaimed at the time that portion of the pit is dry.

### DRILLING PROGRAM

**BOP Requirements:**

13-5/8" Rotating Head

13-5/8" 5M Spacer Spool

13-5/8" 10M Annular

13-5/8" 10M Double Ram

13-5/8" 10M Mud Cross

2" Kill Line

3" Choke Line

13-5/8" 10M Single Ram

G.L.

Mat Board

Mat Board

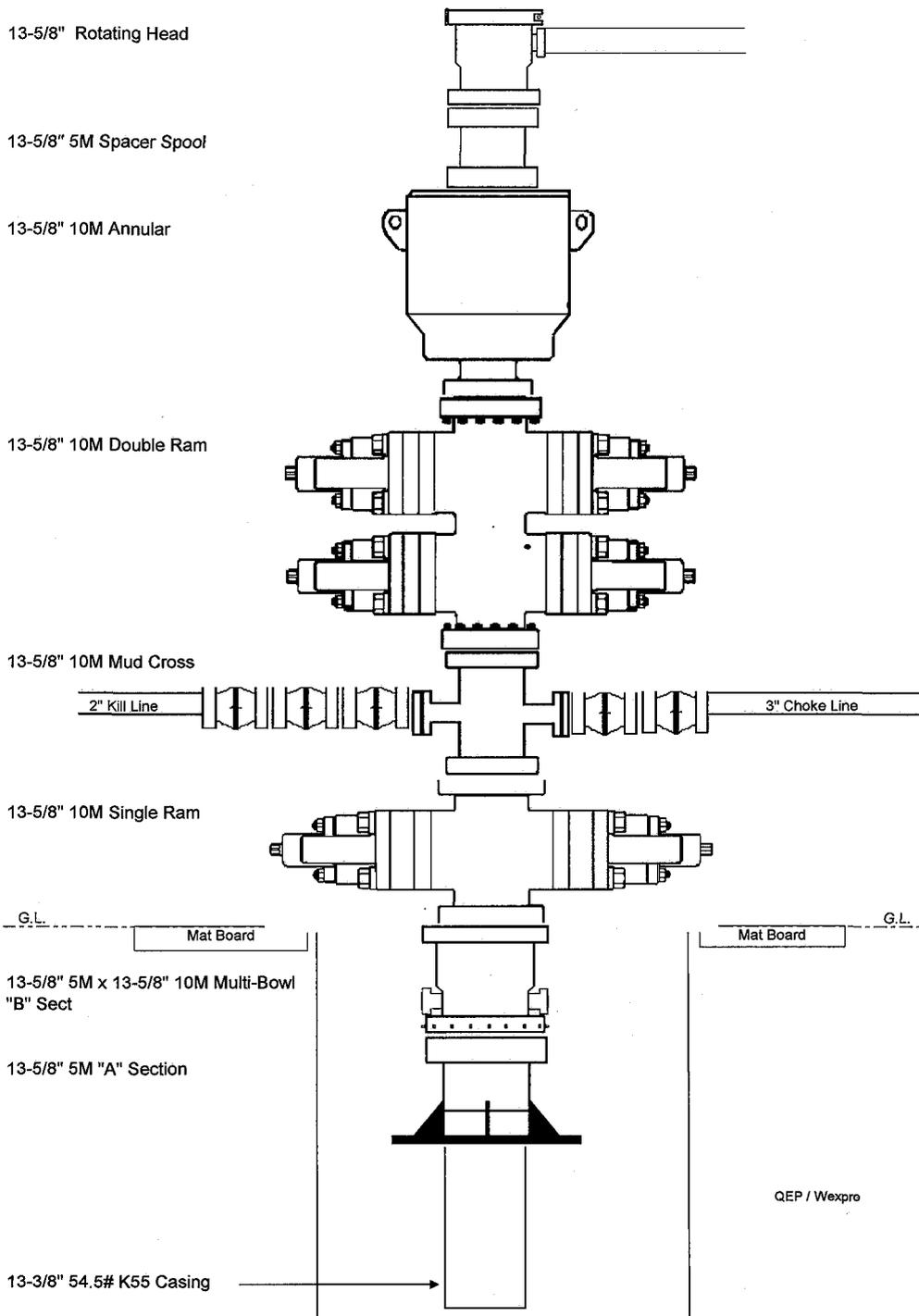
G.L.

13-5/8" 5M x 13-5/8" 10M Multi-Bowl  
"B" Sect

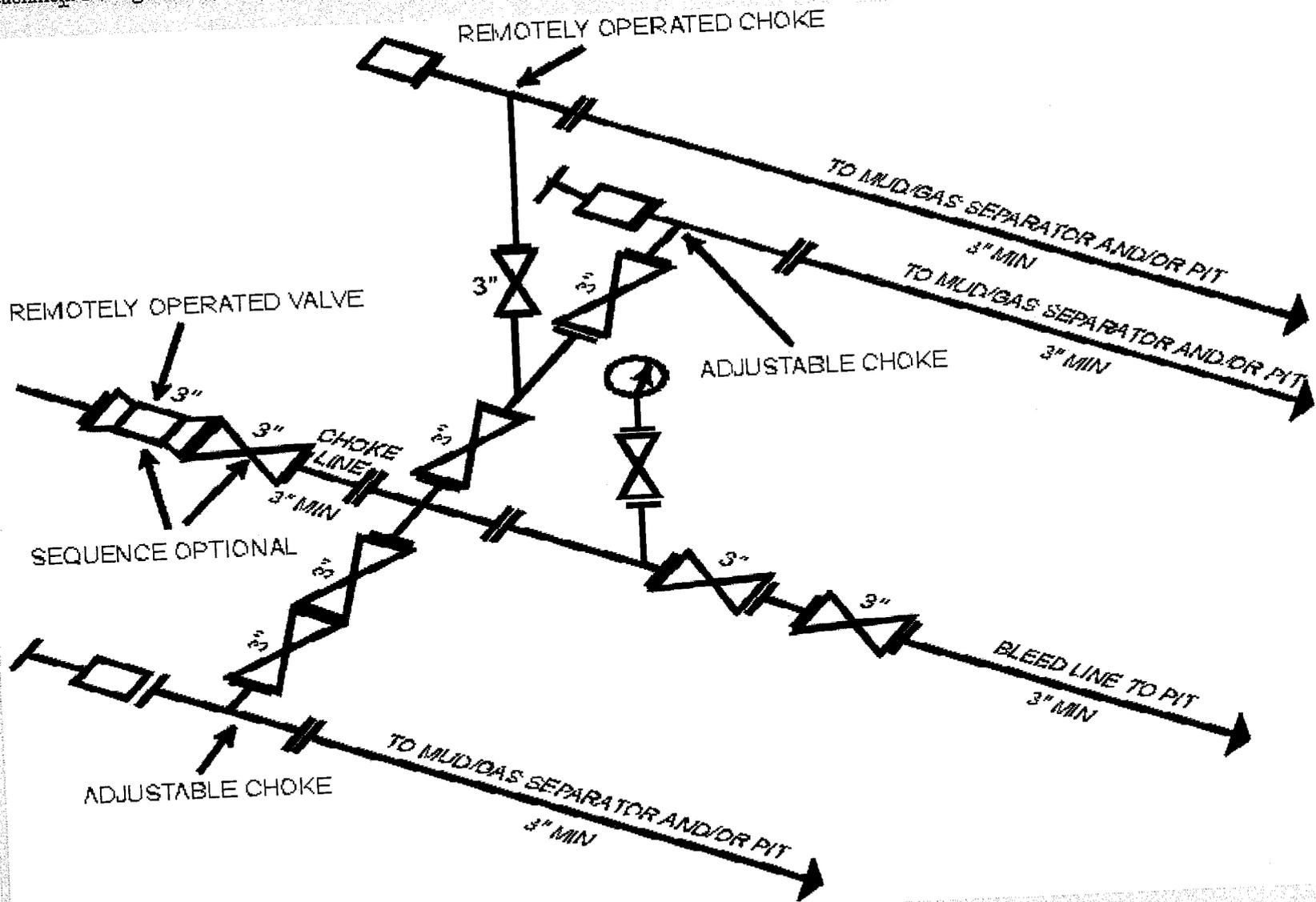
13-5/8" 5M "A" Section

QEP / Wexpro

13-3/8" 54.5# K55 Casing



Attachment I. Diagrams of Choke Manifold Equipment

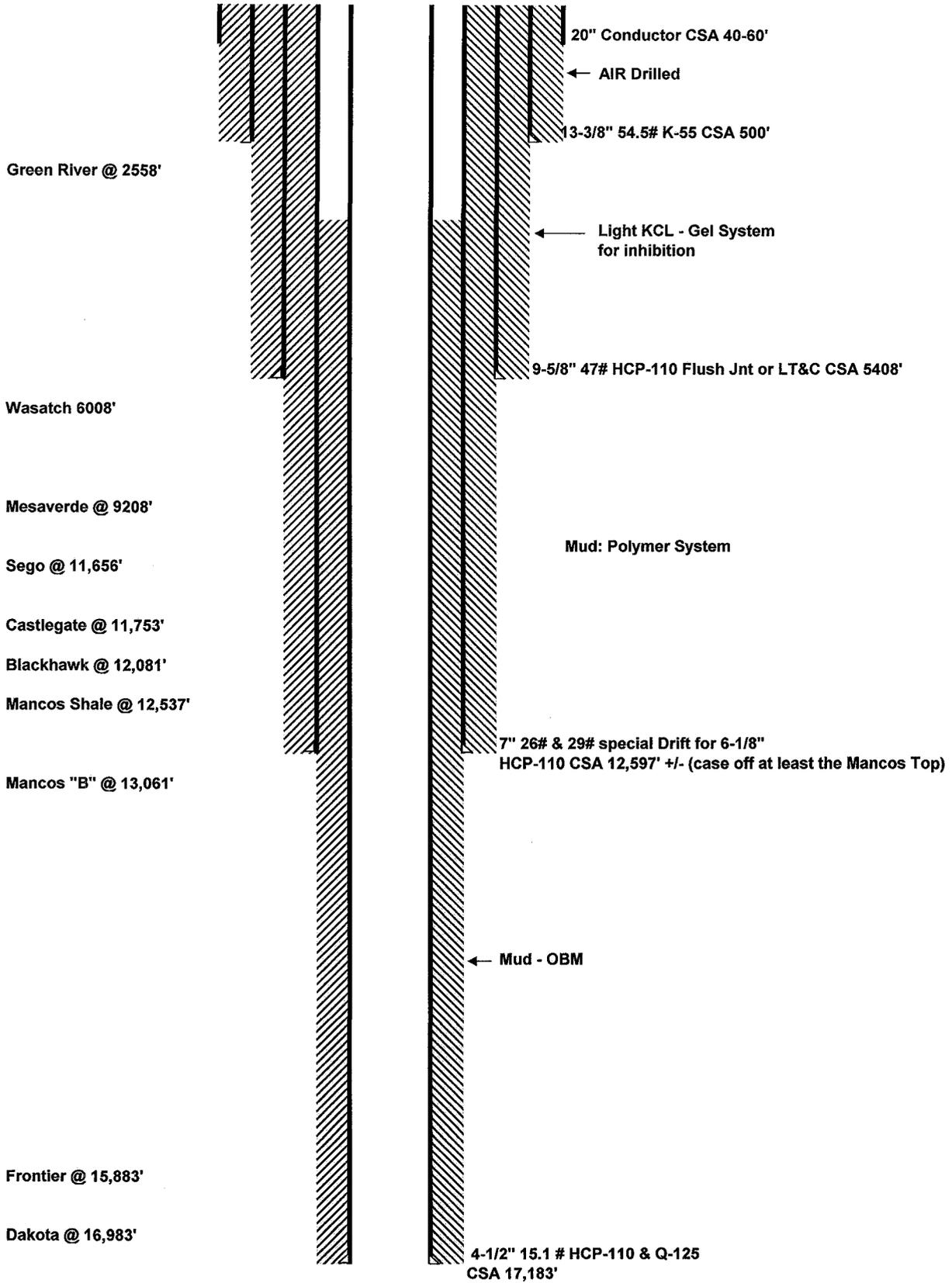


I-4 10M and 15M Choke Manifold Equipment -- Configuration of chokes may vary

[54 FR 39528, Sept. 27, 1989]

Last Updated March 25, 1997 by John Broderick

**GH 6-20-8-21**





**Questar  
Exploration &  
Production Company**

***GH 6-20-8-21***

***Sec 20-T8S-R21E  
Uintah County, Utah***

***Drilling Fluids Program***

***410 17<sup>th</sup> Street, Suite 460 Denver, CO 80202  
(303) 623-2205 (720) 904-7970 Fax***



# Newpark Drilling Fluids, LP

410 17<sup>th</sup> Street, Suite 460

■ Denver, Colorado 80202

■ (303) 623-2205

■ FAX (720) 904-7970

July 9, 2008

Jim Davidson  
Questar E&P  
1050 17th Street, Suite 500  
Denver, CO 80265  
Chief Drilling Engineer

RE: GH 6-20-8-21  
Sec 20-T8S-R21E  
Uintah Co, Utah

Mr. Davidson:

Newpark Drilling Fluids, LP is pleased to present the enclosed revised recommended drilling fluids program for the GH 6-20-8-21 well to be drilled in Uintah County, Utah. This program is for drilling with KCL Water/FlexFirm and/or light mud in the 1st intermediate to 5,408 ft, a polymer fluid system in the 2nd intermediate interval to 12,597 ft, then to T.D. at 17,183 ft with OBM.

The Surface Interval will be pre-set at a depth of 500 ft.

For the 1st intermediate Interval, a light KCL /Flex Firm drilling fluid is planned. Lightly mud up before drilling into the Trona/Water flood area and/or before Intermediate T.D.

Brine kill pills may be needed for trips, logs, and casing operations, depending on pressure encountered while drilling. Trona water flows in this area may require a mud weight of 9.5-9.8 ppg to control. Water flood area's in the Green River may need 10.2-10.5 ppg mud weight to control. A mud-up will be is recommended before 1st Intermediate T.D. at 4,000' +/- . Mud-up to a NewPHPA/Polymer system. Required mud weight at interval T.D. at 5,408' is expected to be in the 8.8-9.0 ppg range.

In the 2nd intermediate interval, drill out with the KCL system from the previous interval.. Mud weight in this interval is expected to be in the 10.5-11.0 ppg range at the 12,597 ft liner interval T.D. Extreme losses have been encountered in this interval on offset wells.

In the Production interval, displace to a 13.0-14.0 ppg OptiDrill OBM system. Maintain fluid density as low as possible to increase penetration rates and reduce the possibility of lost circulation. Use high weight pills for well control during; trips, logs, and casing operations. Mud weight at T.D. is expected to be at +/-15.5 ppg.

The projected drilling time for this project is 45-50 days with an estimated material and engineering cost of \$300,000.00 assuming no unusual delays or problems are encountered. The estimate is based on minimal losses and a 15.0 ppg mud weight at TD. Costs will increase dramatically if severe losses are encountered.

All sack material and bulk barite will be furnished from our Grand Junction, Colorado and Myton, UT facilities with OBM supplied from Newpark's Boulder, WY facility.

If you have any questions following your review of this proposal, please call.

Regards,

Estes Ward  
Operations Manager  
Newpark Drilling Fluids, LP



# Project Summary

Questar  
Exploration & Production  
GH 6-20-8-21  
Sec 20-T8S-R21E  
Uintah, County Utah

## DRILLING FLUID PROPERTIES

### Surface Hole: Air Drilled

Hole Size (in)	TVD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	Total Solids (%)
17-1/2 "	0-500'	NA	NA	NA	NA	NA

### 1st Intermediate Hole: KCL/FlexFirm

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	Chloride Mg/l (x1000)	LGS Solids (%)
12-1/4"	500'- 4,000'	8.6-8.8	2-8	0-4	NC-20	15-20	1-3%
12-1/4"	4,000'-5,408'	9.3-9.5	8-12	8-10	10-12	15-20	3-5%

### 2nd Intermediate Interval: NewPHPA/Polymer

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	pH	LGS Solids (%)
8-1/2"	5,408' -10,000'	9.3-9.8	6-12	6-10	8-10	10.0-11.0	3-6%
8-1/2 "	10,000'-12,597'	10.5-11.0	12-18	12-15	6-8	10.0-11.0	3-6%

### Production Interval: OptiDrill OBM

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	O/W Ratio (%)	HPHT Fluid Loss (ml/30min)	CaCL (mg/l) X 10,000	Electrical Stability (mv)	LGS Solids (%)
6-1/8 "	12,597'-17,183'	15.0-15.5	20-30	8-10	85/15	12-15	250-350	500 +	3-6

- Drilling fluid properties are guidelines only.
- Mud weights for guidelines only, allow hole conditions to dictate actual mud weights.
- Hole conditions should be closely monitored and product mix adjusted accordingly.



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Denver, CO. 80202  
(303) 623-2205 FAX (720) 904-7970

# 1st Intermediate Interval

## 12-1/4" Hole (500' - 5,408')

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**Sec 20-T8S-R21E**  
**Uintah, County Utah**

1st Intermediate Interval Drilling Fluid Properties									
Depth Interval (TVD)	Mud Weight (ppg)	Viscosity (sec/qt)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	pH	API Fluid Loss (ml/30min)	KCL (%)	Low Gravity Solids	Chlorides Mg/l (x1000)
500' - 5,408' +/-	9.0-9.5	28-36	2-10	0-8	10.0-11.0	NC-20	3.0	<1.0	15-20

- Drill out with KCL water maintaining KCL % at 3.0.
- Mix FlexFirm at 3 sks per 100 ft drilled for hole stability and reduced bit balling.
- If a water flow is encountered, treat as needed for carbonates.
- Pump pre-hydrated NewGel and/or Flowzan/SaltGel sweeps for increased hole cleaning, along with LCM sweeps for seepage (Paper LCM while drilling with water)
- If water flows are encountered, spot heavy brine pills for trips, logs and casing operations.
- If hole conditions dictate a mud-up, convert the KCL water to a KCL/Polymer system.
- **Shallow gas/overpressure was encountered on some offsets in the area at 3,700-4,000'. A 9.5-9.9 ppg fluid was needed to control pressure.**

<i>Challenges:</i>	<i>Strategies:</i>
Gravel/Unconsolidated formation	If encountered, pump sweeps of pre-hydrated NewGel with a viscosity of 150 -300 sec/qt.
Water Flows (Trona)	If water flows become excessive, control hydrostatic as needed with air additions and fluid density.
Lost Circulation	While drilling with water, pump LCM sweeps consisting of paper. If drilling with mud, pump mixed LCM pills in the 20-30% LCM range.
Hole Cleaning	Pump sweeps on a regular basis and for any indications of insufficient hole cleaning. Circulate and pump sweeps before connections and for any anticipated down time.
Increase ROP with PDC Bits	Pump 20-40 bbl. Sweeps with NewEase 203, New100N, DynaDet, and SAPP. (FlexDrill Sweeps)
Hole Instability/Sloughing Shale	Consider a mud-up and Asphalt additions.



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 410 17th Street, Suite 460  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

# 1st Intermediate Interval

## 12-1/4" Hole (500 - 5,408')

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### Offset Data:

- Wells in this area have encountered major losses in the Birds Nest.
- Gravel/unconsolidated formation has been encountered at 1380 ft.
- Gas/overpressure has been encountered at 3,700'-4,000'.

### Fluid Recommendations:

- Drill out cement, float collar and new formation. Test the integrity of the casing seat and squeeze if necessary.
- Drill out with Saltwater, aerating as needed to maintain circulation.
- If water is encountered, control flow with reduced air and fluid density.
- If a Trona Water flow is encountered additions of **Lime** and/or **Calcium Chloride** should be used to adjust alkalinities as needed.
- The use of a premix tank is highly recommended. Pre-Hydrate **NewGel** for use as sweeps and for viscosity when a mud up is needed. Fill premix tank with fresh water. Treat out hardness with **SodaAsh** as needed. Add 0.25-0.5 ppb **Caustic Soda** for a 10.0-10.5 pH. Begin additions of 20-25 ppb **NewGel** allow sufficient circulating time for maximum hydration. Add 1.0-2.0 ppb **CFL II**. Then mix additional **NewGel** (30-40 ppb total) or a 120+ funnel viscosity. The pre-hydrated bentonite can be pumped from the premix to the pill tank and pumped downhole for sweeps or can be added slowly to the **Saltwater** for viscosity and rheology control.
- If penetration rates slow sweeps with **New 100N**, **NewEase 203**, **SAPP**, and **DynaDet** should be considered. (1% **New 100N**, 1% **NewEase 203**, 0.5-0.75 ppb **SAPP**, 0.2 % **DynaDet**). "**Flex Sweeps**"
- For trips, an increase in mud weight may be necessary to kill water flows. 9.8-10.0 ppg brine should be considered for this operation.
- Seepage and/or lost circulation may become a problem. For seepage while drilling with water, pump 20-30 bbl pills containing Paper LCM.
- If losses become severe, consider a mud up and LCM sweeps of **Cedar Fiber** and **FiberSeal** should be pumped and incorporated into the system as needed. If losses continue, increase coarse LCM in active system to 15-20%. If losses continue the use of a **New X-Prima Squeeze** is strongly recommended.
- At TD increase funnel viscosity for logs and casing operations as hole conditions dictate. Suggest funnel viscosity be increased to 45-50 sec/qt, before logging operations be attempted.
- At 5,408' ( intermediate T.D.) short trip, check hole conditions. If hole conditions dictate, add pre-hydrated **New-Gel** from the premix tank to the active system to increase funnel viscosity to 45-50 sec/qt and spot in the open hole for logs and casing operations

**DRILL STRING PACK-OFF:** Rapid penetration rate during fast drilling often deteriorates to pack-off, a situation which can lead to lost circulation and/or stuck pipe. Pack-off is typically self-induced by exceeding the maximum rate of penetration for a given annular flow rate. The solution to this is to control the penetration rate to a level that the pumps can adequately clean the hole while maintaining rheological properties in line with existing hydraulic parameters.

**SOLIDS CONTROL:** It is of the utmost importance that the shale shakers and flow line cleaners be equipped with the finest screens possible, and yet handle the flow rate. The desander and desilter units should be evaluated periodically and serviced to maximize performance.



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# 2nd Intermediate Interval

## 8-1/2" Hole (5,408' - 12,597')

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**Exploration & Production**  
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**Sec 20-T8S-R21E**  
**Uintah, County Utah**

2nd Intermediate Interval Drilling Fluid Properties								
Depth Interval (TVD)	Mud Weight (ppg)	Viscosity (sec/qt)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	pH	API Fluid Loss (ml/30min)	Hardness (Mg/l)	Low Gravity Solids
5,408'-10,000'	9.0-9.5	32-36	6-12	6-10	10.0-11.0	8-10	100+	4-6
10,000'-12,597'	10.5-11.0	45-50	10-18	12-14	10.0-11.0	6-8	100+	4-6

- Drill out with water and or mud as hole conditions dictate. After mud-up , allow the system to revert to a fresh water polymer system.
- As mud weight is increased, seepage losses can become severe. Treat with LCM pills as needed. If pill treatments will not contain the losses at reasonable levels, by-pass the shakers, retaining the pills and allowing the LCM concentration to increase as needed.
- Hole instability can occur in the Mesa Verde in this area. If encountered, consider adding Asphalt, building to a 4-6 ppb concentration.
- High pressure may be encountered in the Castlegate/Blackhawk. Monitor closely for increased pressure while drilling and use caution on trips to minimize possible swabbing.
- Mud weight at Intermediate #2 T.D. is expected to be in the 10.5-11.0 ppg range.
- **The use of ECD pills for trips to maintain a low mud weight for drilling has been used successfully on offset wells.**
- **Spotting a LCM pill on bottom during trips has decreased losses in the area.**

Challenges:	Strategies:
Hole Instability/Sloughing Shale	Consider 4-6 ppb Asphalt
Increase in Formation pressure	Monitor well conditions and increase density as needed with <b>NewBar</b> as needed.
Seepage/Lost Circulation	As mud weight is increased (10.0ppg +) seepage and losses may become a problem. For seepage pump 50 bbl sweeps with 5-10 ppb <b>DynaFiber</b> and 10-20 ppb <b>NewCarb</b> as needed. For partial or total losses pump sweeps with 10-15 ppb <b>FiberSeal</b> and <b>Cedar Fiber</b> . Severity of losses will determine size and quantity of LCM added. If losses are not controlled with sweeps consider 10-15% LCM in active system. For severe losses the use of a <b>New X-Prima</b> squeeze should be considered.
Differential Sticking	Maintain mud weight as low as possible. Control Low Gravity Solids below 6%, and control fluid loss at 8-10 ml/30 min.
Increase ROP with PDC Bits	Pump 20-40 bbl. Sweeps with NewEase 203, New100N, DynaDet, and SAPP. (FlexDrill Sweeps)



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 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

## 2nd Intermediate Interval 8-1/2" Hole (5,408'-12,597')

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Uintah, County Utah

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### Offset Data:

Wells in this area have experienced losses as mud weights are increased to control formation pressure. LCM sweeps are strongly recommended for this reason. Mud weights should be kept as low as practical but increases to 11.2 ppg may be required by 2nd Intermediate TD at 12,597'.

- Loss zones on offset wells were at 9200 ft and 9500 ft.
- Losses were encountered at 10,200' on the WV 11AD-14-8-21

### Fluid Recommendations:

- Drill out cement, float collar and new formation with the system from the previous interval. Test the integrity of the casing seat and squeeze if necessary.
- Drill out with water and or mud. If drilling out with water consider a mud up by +/- 7500 ft or as hole conditions dictate.
- Begin additions of 0.5-1.0 ppb **NewPHPA** and maintain throughout the interval.
- Maintain viscosity with PreHydrated **NewGel** until chlorides have dropped below 5000-7000 mg/l. After chlorides have dropped **NewGel** will not need to be pre-hydrated and can be added directly to the system.
- Begin additions of **NewPHPA**. Concentration of **NewPHPA** should be maintained at 0.5-1.0 ppb throughout the interval. As mud weight increases additions of **PHPA** should be switched from **NewPHPA DLMW** to the shorter chain **NewPHPA DSL**.
- If hole conditions dictate, consider 4-6 ppb Asphalt.
- If penetration rates slow sweeps with **New 100N**, **NewEase 203**, **SAPP**, and **DynaDet** should be considered. (1% **New 100N**, 1% **NewEase 203**, 0.5-0.75 ppb **SAPP**, 0.2 % **DynaDet**). "*Flex Sweeps*"
- Increase mud weight as needed to control formation pressures as needed. Mud weights should be maintained as low as practical to reduce chance of losses and differential sticking. Increase mud weight as needed with **NewBar**.
- As density increases additions of **NewEdge** and/or **DrillThin** should be added for rheology control.
- As bottom hole temperatures increase and additional fluid loss control is desired supplement the **AquaBlock** with **NewPac** for fluid loss control Lower API filtrate to 6-8 cc's with additions of **NewPAC** and **AquaBlock**.
- As mud weight is increased seepage and/or lost circulation may become a problem. For seepage pump 20-30 bbl pills containing a combination of **NewCarb** and **DynaFiber** mixed at a 2:1 ratio. If partial or total returns are encountered, LCM sweeps with a varied size distribution including **Cedar Fiber** and **Fiber Seal**, **PhenoSeal** and other assorted sizes should be considered and incorporated into the system as needed. 20-25% LCM in the active system may be required. The type, size and quantity of LCM used will depend on the severity of losses. If losses are severe a **New X-Prima** squeeze should be considered.
- At TD increase funnel viscosity for logs and casing operations as hole conditions dictate. Suggest funnel viscosity be increased to 50-55 sec/qt, before logging or casing operations be attempted.
- While circulating casing it is recommended to reduce Yield Points for cementing operations.



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410 17th Street, Suite 460  
Denver, CO. 80202  
(303) 623-2205 FAX (720) 904-7970

# Production Interval

## 6-1/8" Hole (12,597'-17,183')

**Questar**  
**Exploration & Production**  
GH 6-20-8-21  
**Sec 20-T8S-R21E**  
**Uintah, County Utah**

### Production Interval Drilling Fluid Properties

Depth Interval (TVD)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	O/W Ratio %	HPHT Fluid Loss (ml/30min)	Excess Lime (PPB)	Electrical Stability (MV)	Low Gravity Solids	CaCl Mg/l Water
12,597'-17,183'	15.0-15.5	25-35	8-10	85:15	10-20	2-4	500+	< 6	300K

#### Drilling Fluid Recommendations: (12,597'-17,183')

- Displace to a OptiDrill OBM after finishing the casing job at 12,597'.
- After displacement, maintain the OptiDrill system within the parameters outlined above.
- Offsets in the area have encountered high rates of seepage in this interval. If indications of seepage are observed, sweeps of **NewCarb C**, **Dynafiber C & M**, **NewSeal**, and **CyberSeal** are recommended. Mixing ratios are recommended to be at 5:1 **NewCarb M** to **DynaFiber**, **NewSeal**, and **CyberSeal**. If losses continue to be a problem, consider trying different sizes and combinations until seepage is slowed.
- Maintain rheology low to reduce ECD values and reduce surge and swab during connections and trips.
- Drill as underbalanced as possible to help prevent losses and increase penetration rates.
- For pressure control, spot high weight pills with an equivalent mud weight to drilling ECD's. On trips in, stage these pills out and divert to storage for further use. High weight pills in excess of the drilling ECD should be avoided due to possible lost circulation.

Challenges	Strategies
Displacement	<ul style="list-style-type: none"> <li>• Have 1200-1300 bbls of OBM volume on location along with a pump capable of keeping up with displacement rates.</li> <li>• Pump a 10-20 bbl viscosified OBM spacer ahead of the OptiDrill (enough for 500 ft + separation)</li> <li>• A steady pump rate for either turbulent or plug flow should be used. Reciprocate and rotate to assist in minimizing channeling.</li> <li>• Do not shut down once displacement commences.</li> <li>• Should any contamination occur, isolate the contaminated fluid for reconditioning.</li> </ul>
Seepage/lost Circulation.	Pump LCM sweeps when seepage and/or losses are indicated. Sweeps should be a mixture of, <b>NewCarb</b> , <b>DynaFiber</b> , <b>NewSeal</b> , and <b>CyberSeal</b> . If lost returns are encountered, consider a <b>Diaseal M</b> or cross linked polymer squeeze.
Maintaining Oil wet solids	For every 1.0 ppg mud weight increase, mix 0.02 gal/bbl OptiWet
Pressure control	<ul style="list-style-type: none"> <li>• Spot weighted pills calculated to give a bottom hole pressure equal to drilling ECD.</li> <li>• Do not exceed drilling bottom hole pressure with the ECD pill. Lost circulation has been a problem on offset wells.</li> <li>• Stage weighted pills out of the hole and recover for future use.</li> </ul>



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410 17th Street, Suite 460  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

# Production Interval

6-1/8" Hole (12,597' - 17,183')

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## Maintenance Procedure:

**HPHT** - Maintain HPHT values within programmed parameters. Additions of **OptiMul** and **OptiPlus**, at recommended concentrations should maintain the HTHP at recommended levels. If hole conditions indicate a need for lower HPHT values, **Opti G** at 2-4 ppb is recommended.

**Electrical Stability**— Electrical stability should be used as a guide not as an absolute in determining maintenance requirements. Actual values are not critical but should be observed for trends or changes. Decreases in electrical stability should be noted along with other mud properties to determine treatments. To increase electrical stability add emulsifiers and wetting agents **OptiMul** and **OptiPlus** or decrease water content.

**Oil/Water Ratio** - Maintain the oil/water ratio in the 90:10-80:20 range depending on mud weight and condition.. Higher water content will decrease the amount of **OptiVis** needed for rheology.

**Mud weight** - Maintain minimum fluid densities with solids equipment. Monitor hole conditions and all drilling parameters closely for indications of increases in formation pressures and adjust fluid densities accordingly. Drilling with a minimum amount of overbalance will reduce the possibility of losing returns and/or of differentially sticking the drill string. Mud weight on offset wells was in the 15.0-15.5 ppg range at T.D.

**Rheology** - Maintain solids as low as possible. Increase rheology as needed for hole cleaning with a combination of **OptiVis (Bentone 910)** and **Opti Vis RM or Opti Vis PS** and water content.

**Lime** - Maintain the excess Lime at 2-3 ppb excess.

**Hole cleaning** - Calculate rheology requirements based on ROP, pump rates and hole conditions. Adjust as needed .

**Mud losses downhole**—Monitor ECD's with Hy-Calc, maintaining the lowest values possible. If losses are encountered; sweeps containing **NewCarb, DynaFiber, Opti-G, and NewSeal** should be circulated to aid in the prevention of losses. If seepage losses continue and/or become severe, consider spotting a pill with **Magma Fiber (Fine & Regular)** and the above formulation. Keep the hole full at all times, and avoid excessive swabbing and/or surge actions when tripping.

**Solids Control** - Maintain low gravity solids at 4-6 % by volume. The high performance shakers should be equipped with the finest mesh screens that will handle the circulating volume and not cut barite out.

**Water Contamination**— Keep all water sources off the mud pits. If contamination occurs, treat with emulsifiers and Calcium Chloride as needed.



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**Production Interval**  
**6-1/8" Hole (12,597' - 17,183')**

**Questar**  
**Exploration & Production**  
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**Uintah, County Utah**

**Recommended materials for relaxed filtrate OptiDrill system :**  
**( 85:15 Oil/Water Ratio)**

<b>Product</b>	<b>Function</b>	<b>Concentration</b>
<b>NewBar</b>	Weighting material	As needed
<b>OptiVis</b>	Organophilic Clay / Viscosifier	2-4 ppb
<b>OptiMul</b>	Primary Emulsifier	2.0 ppb
<b>OptiPlus</b>	Secondary Emulsifier	4.0 gal/bbl.
<b>OptiVis RM</b>	Low End Rheology Modifier	0.1-0.2 ppb
<b>Calcium Chloride Water</b>	Internal Phase	10.0%-20.0 % by volume
<b>Calcium Chloride</b>	Salinity/Activity	300,000 - 350,000 mg/l
<b>OptiG</b>	Fluid Loss control Additive	1.0-4.0 ppb
<b>Lime</b>	Alkalinity Additive	5 ppb
<b>NewCarb M</b>	Loss Circulation Material	10.0 ppb
<b>NewCarb F</b>	Loss Circulation Material	As required
<b>DynaFiber</b>	Loss Circulation Material	As required



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 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

**QUESTAR EXPLORATION AND PRODUCTION COMPANY**

**WELLSITE CUTTINGS MANAGEMENT PLAN**

**UINTA BASIN PROJECT AREA**

**GH 6-20-8-21**

**Township: 8 South, Range 21 East**

**Uintah County, Utah**

# UINTA BASIN CUTTINGS MANAGEMENT PLAN

## Solidifying / Stabilizing Cuttings Pits

### 1. PROJECT DESCRIPTION

We drill and set conductor, then drill, case and cement surface casing, then drill, run casing, and cement intermediate sections, then finally drill the production holes. This insures that surface water is protected and is not exposed to more saline waters and that treatable water is not exposed to oil based mud (OBM). In addition, water and oil is skimmed off during the various phases for reuse and to minimize the fluid levels in the pit.

The wells to be drilled use oil base drilling fluid during the production section of each well. As the production section of the well is drilled, drill cuttings will be generated and separated from the drilling fluid, then deposited in a single on-site waste pit with synthetic liners (cuttings pit). These oil base mud cuttings (OBMC) are expected to contain elevated levels of adhered entrained hydrocarbons due to their prior contact with the OBM. The OBMC will be collected in a steel catch tank as drilling progresses, moved to the cuttings pit by a wheel loader, and mixed with the water based cuttings generated during drilling of the upper sections of the wellbore.

A state approved contractor will treat the waste placed in the cuttings pit using the solidification/stabilization (S/S) process described below. Prior to beginning the S/S process, the contractor will collect samples of the contents of the cuttings pit for criteria verification. The waste will be treated in place inside the pit and contractor will finish by backfilling the pit constituting final disposal of the drilling waste.

### 2. GENERAL DESCRIPTION OF THE SOLIDIFICATION/STABILIZATION PROCESS

The S/S process involves the controlled addition of a specially blended Portland-cement-based reagent to the drilled cuttings, OBM and WBM solids and liquids, and makeup water as required followed by thorough mixing of the reagent with the waste to form homogeneous slurry. Hydrocarbons and chlorides in the waste are broken up into very small droplets or "particles" and these particles are dispersed throughout the reagent/waste mixture during the mixing phase. After the mixing phase, an irreversible chemical reaction occurs between the cementitious reagent and water present in the slurry causing the slurry mixture to rapidly transform into a solid granular material. The previously dispersed and isolated particles are immobilized to a very high degree within the interlocked cementitious lattice of each solidified granule. This waste treatment process prevents the hydrocarbons or chlorides from re-coalescing within the processed waste form and reduces their release to the surrounding environment. Chemical properties imparted by the process also stabilize various metals, if present in the waste, by transforming them into less-soluble forms. This in conjunction with the physical entrapment of metals within each solidified granule greatly reduces their availability to the surrounding environment. In summary S/S rapidly transforms physically unstable waste into a stable solid material and reduces the leaching rate of target constituents to such a degree that they can no longer cause harm to the surrounding environment.

### 3. ESTIMATED VOLUMES PER WELL

Section	Top	Bottom	Size	Volume, ft <sup>3</sup>	Swell	Excess	Tot Vol, ft <sup>3</sup>	Tot Vol, bbl
Surface	60	500	17.5	735.01	1.3	1.7	1624.38	289.29
Intermediate	500	5408	12.25	4017.37	1.3	1.4	7311.62	1302.16
Intermediate	5408	12597	8.5	2833.17	1.3	1.4	5156.36	918.32
Production	12597	17183	6.125	938.45	1.3	1.3	1585.98	282.45
Additional Volume							1937.03	345.00
Total per Well							17615.37	3137.22

### 4. PROJECT OBJECTIVES

The S/S objectives are:

- 1 To permanently reduce the leaching rate of target constituents to at or below prescribed limits for confinement in the soil.
  - 1.1 Leachable Oil and Grease will be less than 10 mg/L.

# UINTA BASIN CUTTINGS MANAGEMENT PLAN

## Solidifying / Stabilizing Cuttings Pits

- 1.2 Leachable Total Dissolved Solids will be less than 5000 mg/L and/or leachable salts will be below acceptable site-specific guidelines.
  - 1.3 Compliance with the performance criteria will be certified by a third party accredited testing laboratory utilizing the appropriate tests as prescribed. Laboratory test results will be documented in a closure report submitted to the client and to the required regulatory agencies as may be required after completion of the project.
- 2 To solidify the unconsolidated waste to support backfilling soil cover and resist subsidence.
  - 3 Rapid solidification of the waste to reduce pit closure time.
  - 4 Minimize waste volume increase to maximize depth of native soil cover over processed material.

### 5. CONTRACTOR ACTIVITIES

1. Contractor will collect samples of the raw waste and bench test to determine S/S reagent formulation and reagent/waste mix ratios necessary to achieve performance criteria.
2. Contractor will deliver equipment and experienced personnel to the site.
3. Contractor supervisor will conduct a job site safety assessment with crew discussing relevant site safety hazards, required PPE, and accident avoidance. Contractor safety meetings will be held prior to each day's work throughout the project.
4. Contractor and client representative will determine the final actual volume of contents to treat in each pit at the subject site prior to commencing operations.
5. Contractor will construct proper storm drainage protection, if necessary, to surround the pit areas during the project.
6. Contractor will perform preliminary admixing of each pit's contents prior to S/S reagent introduction and prepare the site to facilitate waste processing. Care will be taken to maintain waste containment throughout all processing phases.
7. Contractor will prepare and deliver S/S reagents to the site. Reagents will be added to the pit waste utilizing a special filter-equipped discharge hopper.
8. Contractor will perform the S/S on the waste in-situ in order to chemically solidify the waste and immobilize target constituents of concern within the processed material.
9. After processing all the waste, contractor will collect a composite sample of the processed pit material and submit the sample to a certified third party laboratory for analysis to verify the processed material complies with criteria indicated in the Project Objectives, Section 4.
10. Contractor will place a minimum of three feet (3') of native spoil over the S/S material in the pit in order to backfill to the adjacent grade constituting final disposal of the processed material. Spoil for backfilling will be taken from existing excavated spoils at the site.
11. Contractor will then promptly demobilize equipment and personnel concluding site operations.

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**DIVISION OF OIL, GAS AND MINING**

**SPUDDING INFORMATION**

Name of Company: QUESTAR EXPL & PROD COMPANY

Well Name: GH 6-20-8-21

Api No: 43-047-38662 Lease Type: FEDERAL

Section 20 Township 08S Range 21E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # RATHOLE

**SPUDDED:**

Date 08/22/08

Time 5:00 PM

How DRY

**Drilling will Commence:** \_\_\_\_\_

Reported by KERRY SALES

Telephone # (801) 598-5087

Date 08/25/08 Signed CHD

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT--" for such proposals

5. Lease Designation and Serial No.  
**UTU-0140740**

6. If Indian, Allottee or Tribe Name  
**UTE TRIBE**

7. If Unit or CA, Agreement Designation  
**GYPSUM HILLS**

8. Well Name and No.  
**GH 6-20-8-21**

9. API Well No.  
**43-047-38662**

10. Field and Pool, or Exploratory Area  
**WONSITS VALLEY**

11. County or Parish, State  
**UINTAH**

**SUBMIT IN TRIPLICATE**

1. Type of Well  
Oil  Gas   
Well  Well  Other

2. Name of Operator  
**QUESTAR EXPLORATION & PRODUCTION CO.**

3. Address and Telephone No. **11002 EAST 17500 SOUTH - VERNAL, UT 84078**  
Contact: **Dahn.Caldwell@questar.com**  
**435-781-4342 Fax 435-781-4357**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**1956' FNL, 1688' FWL, SENW, SEC 20-T8S-R21E**

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>SPUD</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note) Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)  
**On 8/22/08 - Drilled 80' of 30" conductor hole. Set 80' of 20" conductor pipe. Cmtd w/ Ready Mix.**

**RECEIVED**  
**AUG 25 2008**  
DIV. OF OIL, GAS & MINING

3 - BLM, 2 - Utah OG&M, 1 - Denver, 1 - file Word file-server

14. I hereby certify that the foregoing is true and correct.  
Signed Dahn Caldwell  Title Office Administrator II Date 8/22/08

(This space for Federal or State office use)  
Approved by: \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any \_\_\_\_\_

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



**Operations Summary Report**

Legal Well Name: GH 6-20-8-21  
 Common Well Name: GH 6-20-8-21  
 Event Name: DRILLING  
 Contractor Name: PRO-PETRO  
 Rig Name: INGERSOL RAND

Start: 8/24/2008  
 Rig Release: 8/24/2008  
 Rig Number: 6

Spud Date: 8/22/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/25/2008	06:00 - 09:00	3.00	LOC	2	DRLCON	SPUD WELL ON 8-22-08 AT 17:00 HRS. DRILL 30" HOLE 80' DEEP AND SET 20" CONDUCTOR PIPE. CEMENT WITH READY MIX. PETE MARTIN RAT HOLE.
	09:00 - 18:30	9.50	DRL	9	DRLSUR	HAMMER DRILL 17.5" HOLE TO 530' BLOW DOWN WELL.
	18:30 - 19:30	1.00	TRP	3	DRLSUR	LAY DOWN DRILL STRING.
	19:30 - 22:00	2.50	CSG	2	CSGSUR	RUN 12 JOINTS OF 13 3/8" J-55, 68#, BTC CASING AS FOLLOWS:SHOE AT 510', FLOAT COLLAR AT 465.47'. RAN 3 CENTRALIZERS FROM 500' TO 380' AND ONE AT 84'. NOTE: ALL MEASURMENTS ARE FROM GROUND LEVEL. YOU WILL NEED CASING TEST WHEN YOU TEST BOP'S.
	22:00 - 23:00	1.00	CMT	2	CSGSUR	CEMENT AS FOLLOWS: PUMP 80 BBL OF FRESH WATER AND 20 BBL OF GEL SPACER. LEAD CEMENT 15.8 PPG, 500 SK, 102 BBL, YEALD 1.15, GAL/SK 5, DISPLACE WITH 69 BBL OF FRESH WATER. PLUG BUMPED TO 800 PSI OK, FCP 300, FLOAT HELD. CEMENT TO SURFACE 24 BBL.
23:00 - 06:00 06:00 -	7.00	WOT	1	CSGSUR CSGSUR	WAIT ON CEMENT. CONTACT BLM MICHAEL LEE ON 8-21-2008 AT 14:15 HRS FOR SPUDDING ON 8-22-2008 AT 17:00 HRS. CONTACT UTAH STATE ON 8-21-2008 AT 14:30 HRS FOR SPUDDING ON 8-22-2008 AT 17:00 HRS. NOTIFYED WONSIT VALLEY AND RED WASH OFFICE FOR SPUDDING WELL. CONTACT BLM JAMIE SPARGER ON 8-23-2008 AT 23:00 HRS FOR RUNNING CASING AND CEMENT ON 8-24-2008 AT 16:00 HRS. LEFT VOICE MESSAGE.	
9/3/2008	06:00 - 18:00	12.00	LOC	4	RDMO	RIG DOWN TOP DRIVE RAIL, SERVICE LOOP RIG DOWN BOP LIFTER UNHOOK KOOMEY UNIT, LAY OVER DERRICK @ 1500 HRS, UNSPOOL DRAWWORKS TAKE WRAPS OFF OF DEAD MAN, REMOVE ROTARY DRIVELINE, UNBOLT ROTARY CHAIN, REMOVE CHOKE LINE R/D FLARE LINES & DRY SHAKER
9/4/2008	18:00 - 06:00	12.00	LOC	4	RDMO	40% RIGGED DOWN & 20% RIG MOVED 0 % RIGGED UP
	06:00 - 18:00	12.00	LOC	4	RDMO	RIG DOWN UNBRIDLE BLOCKS, LAY A LEGS OVER, UN-PIN DERRICK FOR RIG FLOOR REMOVE DOG HOUSES, RIG DOWN MOTOR PACKAGED, WATER TANKS PULL ELECTRICAL CABLES & SPOOL UP REMOVE TOP DRIVE MODULE HOUSE OFF SUB UNDO DRAWWORKS LEADS & REMOVE DRAWWORKS F/ FLOOR, R/D & MOVE GRASSHOPPER, DISASSEMBLY REMAINING SUB STRUCTURE, LOAD OUT BACK YARD & SOLID CONTROL EQUIPMENT ALL MOVE TO NEW LOCATION NIPPLE DOWN BOPS MOVE TO NEW LOCATION ON OLD LOCATION ( SUCTION TANK & ONE MUD TANK W/ CAMP & RIG OFFICES
9/5/2008	18:00 - 06:00	12.00	LOC	4	RDMO	95% RIG PACKAGED OFF OF OLD LOCATION 15% RIGGED UP ON NEW LOCATION NOTE: DURING RIGGING UP UNITS MECHANIC & RIG MANAGER WILL CARRY OUT FULL INSPECTION ON DRAWWORKS
	06:00 - 18:00	12.00	LOC	4	MIRU	PRESSURE WASH DERRICK DURING MOVING RIG & RIGGING UP SPOT SUB STRUCTURE & RIG UP FLOOR, RAISE A LEGS PIN SAME, PIN DERRICK TO RIG FLOOR SET TOP DRIVE HOUSE SET GAS BUSTER & BACK YARD MOVE CAMP & OFFICES COMPLETE RIG OFF OLD LOCATION @ 0900 HRS, & CAMP OFF OLD LOCATION @ 1400 HRS, CLEAN OLD LOCATION
9/6/2008	18:00 - 06:00	12.00	LOC	4	MIRU	70 % RIGGING UP ON NEW LOCATION
	06:00 - 18:00	12.00	LOC	4	MIRU	INSPECT DRAWWORKS FOUND LOW CLUTCH CHAIN ( ROLLER'S

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 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/6/2008	06:00 - 18:00	12.00	LOC	4	MIRU	MISSING & SOME CRACK ) CHANGE OUT OIL FINISHED INSPECTION @ 1630 HRS, PICK UP DERRRICK F/ HEAD RACK STRESS LOAD TEST FOR 30 MINUTES & RASIE DERRICK PIN TO A LEGS @ 1800 HRS. FULL INSPECTION WAS CARRIED OUT ON TOP DRIVE FOUND NO DEFECTS & INSPECTED ALL THREAD CONNECTION BY THIRD PARTY R/UP DRY SHAKER & CUTTING LINES TO WASTE PIT HOOK UP ALL ELE. CABLE CHANGE OUT MAIN BLOWER IN SCR HOUSE ( MOTOR GOING BAD ) REPLACE HYDRAULIC CONTROL VALVE SYSTEM @ DRILLER CONSOLE OBSERVE DURING LAST WELL CONTROL VALVE WAS WASHING OUT CAUSING BREAK OUT CYLINDER NOT TO WORK PROPERLY R/UP KOOMEY LINES, WATER LINES, YELLOW DOG, STALLION OBM FARM TANKS, GROUND RODS, HOPPER HOUSE,
	18:00 - 06:00	12.00	LOC	4	MIRU	80 % RIGGED UP PLAN IS TO CARRY OUT FULL INSPECTION ON MUD PUMPS DURING RIGGING UP TOP DRIVE & RAILS ( UNIT WILL HAVE THREE MECHANIC'S ON LOCATION @ 0800 HRS ) TO COMPLETE INSPECTIONS
9/7/2008	06:00 - 18:00	12.00	LOC	4	MIRU	CALL GAYLAND RICH ( BLM ) ABOUT BOP TEST LEFT VOICE MESSAGE @ 12:30 HRS ON 9/6/08, CALL ON 9/5/08 LEFT MESSAGE @ 1430 HRS. R/UP & CARRY OUT INSPECTION ON BOTH MUD PUMPS & ENGINES BY UNITS MECHANIC FOUND NO DEFECTS START WATER CIRCULATION RUN KOOMEY HOSE, LAYDOWN CAT WALK BRIDLE DOWN, RIG UP DERRICK CLIMBER P/UP TOP DRIVE RAILS, HOOK UP SWIVEL, TOP DRIVE RIG UP SERVICE LOOP, HOOK UP TOP DRIVE TO TOP DRIVE HOUSE, PUT ON TURNBUCKLES FOR TOP DRIVE TRACK. 90% RIGGED UP
	18:00 - 06:00	12.00	LOC	4	MIRU	
9/8/2008	06:00 - 12:00	6.00	LOC	4	MIRU	REPLACE LOW CLUTCH DRAWWORKS CHAIN W/ AMERICAN CHAIN R/UP FLOW LINE ATT. TO TORQUE UP TOP DRIVE CONNECTIONS LOST COMMUNICATION W/ DRILLER CONSOLE & TOP DRIVE CALL OUT TECHICAN FOUND DAMAGED CABLE GOING TO TOP DRIVE INSTALL BELLS & ELEVATORS ON TOP DRIVE
	12:00 - 14:30	2.50	BOP	1	DRLIN1	TORQUE UP BOPS CONNECTIONS & PREPARE TO TEST BOPS FUNCTION TEST BOPS & P/TEST BOPS W/ LOW 250 PSI & HIGH 5000 PSI
	14:30 - 22:00	7.50	BOP	2	DRLIN1	
	22:00 - 00:00	2.00	OTH		DRLIN1	INSTALL WEAR BUSHING & LOW PRESSURE ROTATING HEAD ASSEMBLY
9/9/2008	00:00 - 02:00	2.00	TRP	1	DRLIN1	LAY OUT BHA & STRAP
	02:00 - 06:00	4.00	TRP	1	DRLIN1	M/UP RE-TIP REED MILL TOOTH BIT 12 1/4" & PICK UP 12 1/4 BHA
	06:00 - 07:00	1.00	TRP	1	DRLIN1	CONTINUE TO PICK UP 12 1/4 BHA TAG LANDING COLLAR @ 466' OBSERVE SPEAR LEAKING ON DRAWWORKS DRILLER SIDE
	07:00 - 07:30	0.50	CIRC	1	DRLIN1	CIR. BOTTOMS UP
	07:30 - 09:00	1.50	LOG	4	DRLIN1	CUT & SLIP DRILLING & WAIT ON UNITS MECHANIC
	09:00 - 13:30	4.50	RIG	2	DRLIN1	REPAIR WATER LEAK ON DRAWWORKS CHANGE OUT SNUFFING BOX
	13:30 - 15:30	2.00	DRL	5	DRLIN1	DRILL OUT SHOE TRACK & CIR. BOTTOMS UP
	15:30 - 16:00	0.50	EQT	2	DRLIN1	FIT EQU. TO 10.5 PPG HOLD FOR 15 - MINUTES ( GOOD TEST )
	16:00 - 17:30	1.50	DRL	1	DRLIN1	DRILL F/ 520' TO 570'
	17:30 - 18:00	0.50	CIRC	1	DRLIN1	CIR. BOTTOMS UP
18:00 - 19:00	1.00	TRP	2	DRLIN1	TRIP OUT HOLE TO PICK UP HOLE OPENER & 8 3/4 BIT & MOTOR	
19:00 - 21:30	2.50	TRP	1	DRLIN1	L/D 12 1/4 BIT & M/UP 8 3/4 BIT & MUD MOTOR W/ 12.25 HOLE OPENER& RIH	

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 Group:  
 Rig Number: 6

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/9/2008	21:30 - 06:00	8.50	DRL	1	DRLIN1	DRILL F/ 570' TO 1280' 710' @ 84' P/HR WOB 10 TO 20 MUD WT 9 PPG VIS 29
9/10/2008	06:00 - 10:00	4.00	DRL	1	DRLIN1	DRILL F/ 1280' TO 1578' 298' @ 75' P/HR WOB 10/20 MUD WT 9.0 PPG VIS 32
	10:00 - 10:30	0.50	CIRC	1	DRLIN1	CIR. BOTTOMS UP WIRE LINE ( .6 DEG. ) @ 1528'
	10:30 - 15:00	4.50	DRL	1	DRLIN1	DRILL F/ 1578' TO 1866' 288' @ 66' P/HR WOB 10/20 MUD WT 9.1 PPG VIS 30
	15:00 - 15:30	0.50	RIG	1	DRLIN1	RIG SERVICE
	15:30 - 18:00	2.50	DRL	1	DRLIN1	DRILL F/ 1866' TO 2040' 174' @ 70' P/HR WOB 10/20 MUD WT 9.1 PPG VIS 32
	18:00 - 18:30	0.50	OTH		DRLIN1	RE-TIGHTEN ROTATING HOUSING ( LEAKING @ CONNECTION )
	18:30 - 19:00	0.50	DRL	1	DRLIN1	DRILL F/ 2040' TO 2089'
	19:00 - 20:00	1.00	RIG	2	DRLIN1	TOP DRIVE REPLACE PIN ON AN CYLINDER ARM
	20:00 - 05:30	9.50	DRL	1	DRLIN1	DRILL F/ 2089' TO 2534' 445' @ 48' P/HR WOB 15/20 MUD WT 9.2 PPG VIS 31
	9/11/2008	05:30 - 06:00	0.50	CIRC	1	DRLIN1
06:00 - 11:30		5.50	DRL	1	DRLIN1	DRILL FROM 2,534 TO 2,724 (ROP 34.5' HR) WOB 20-24, ROT 75, MW 9.2, VIS 29, BG GAS 800 UNITS OFF BUSTER
11:30 - 12:00		0.50	RIG	1	DRLIN1	SERVICE RIG, TOP DRIVE, SWIVEL
9/12/2008	12:00 - 18:00	6.00	DRL	1	DRLIN1	DRILL FROM 2,724 TO 2,925 (ROP 33.5' HR) WORK SAME PERRAMETERS,, HAD TAR COMING OVER SHAKER 2825'
	18:00 - 06:00	12.00	DRL	1	DRLIN1	DRILL FROM 2,925 TO 3,297 (ROP 31' HR) WORK SAME PERAMETERS--DRILLING THRU BIRDS NEST @ REPORT TIME
	06:00 - 08:30	2.50	DRL	1	DRLIN1	DRILL FROM 3,297 TO 3,392 (ROP 38' HR) WOB 20-24, RPM 75, MW 9.0, VIS 29, BG GAS 1600 UNITS
	08:30 - 09:30	1.00	SUR	1	DRLIN1	SURVEY @ 3323 1.3 DEG AZ 178.9
	09:30 - 12:30	3.00	DRL	1	DRLIN1	DRILL FROM 3,392 TO 3,483 (ROP 30.3) WORK SAME PERAMETERS, HAD ALOT OF SLIP STICK AND SLOWED TO 15' HR FOR 45 MIN
	12:30 - 14:30	2.00	TRP	10	DRLIN1	TRIP OUT FOR BIT CHANGE
	14:30 - 15:30	1.00	TRP	1	DRLIN1	LAY DOWN HOLE OPENER, MOTOR, BIT AND PICK UP THE SAME
	15:30 - 17:00	1.50	TRP	10	DRLIN1	TRIP IN HOLE FILL @ BHA
	17:00 - 17:30	0.50	RIG	1	DRLIN1	SERVICE RIG BLOCK, SWIVEL, DRAW-TOOL
	17:30 - 04:30	11.00	DRL	1	DRLIN1	DRILL FROM 3,483 TO 3,854 (ROP 33.7' HR) WOB 17-24, RPM 75-80, MW 9.0+, VIS 32, BG GAS DRILLED SOME REAL AGGRESSIVE SAND @ 3650 AND HAVE BEEN IN AND OUT OF SHARP SAND ALL NIGHT
9/13/2008	04:30 - 05:00	0.50	SUR	1	DRLIN1	DROP SURVEY AND CHECK FLOW-WELL FLOWING 1/4" STREAM
	05:00 - 06:00	1.00	DRL	1	DRLIN1	DRILL FROM 3,854 TO 3862 (ROP 8' HR) WORK DIFFERENT PERAMETERS BRING MW TO 9.4 IN ACTIVE
	06:00 - 08:30	2.50	TRP	10	DRLIN1	TRIP OUT OF HOLE NO HOLE PROBLEMS
	08:30 - 09:30	1.00	TRP	1	DRLIN1	LAY DOWN MOTOR, HOLE OPENER, X-OVER, PICK UP NEW 8 1/2" MOTOR AND BIT
	09:30 - 12:00	2.50	TRP	10	DRLIN1	TRIP IN HOLE FILL @ BHA AND 3743
	12:00 - 13:30	1.50	REAM	1	DRLIN1	WASH AND REAM FROM 3,743 TO 3,862-- TOP OF 8 3/4" PILOT STARTED @ 3,823'
	13:30 - 17:30	4.00	DRL	1	DRLIN1	DRILL FROM 3,862 TO 3,971(ROP 27.3' HR) WOB 12-14, DHRPM 127, MW 9.4, VIS 29, BG GAS 414
	17:30 - 18:00	0.50	RIG	1	DRLIN1	SERVICE RIG TOP DRIVE, BLOCKS AND SWIVEL
	18:00 - 06:00	12.00	DRL	1	DRLIN1	DRILL FROM 3,971 TO 4,308 (ROP 28' HR) WOB 12-15, DHRPM 125, MW 9.3, VIS 30, BG GAS 120-- NO LOSSES
	9/14/2008	06:00 - 13:30	7.50	DRL	1	DRLIN1
13:30 - 14:00		0.50	RIG	1	DRLIN1	SERVICE TOP DRIVE, BLOCKS, SWIVEL

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Start: 8/24/2008  
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Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/14/2008	14:00 - 20:00	6.00	DRL	1	DRLIN1	DRILL FROM 4,537 TO 4,728 (ROP 31.8' HR) WORK SAME PERAMETERS, MW 9.3, VIS 31, BG GAS 25
	20:00 - 21:00	1.00	SUR	1	DRLIN1	CIRCULATE AND SURVEY @ 4655.9 DEG, 149.0 AZ
	21:00 - 06:00	9.00	DRL	1	DRLIN1	DRILL FROM 4,728 TO 4,963 (ROP 26.1' HR) WOB 13-20, DHRPM 120-145, MW 9.3, VIS 32, HAD ALOT OF SLIP STICK @ 4805-4823 & 4871-4905
9/15/2008	06:00 - 12:30	6.50	DRL	1	DRLIN1	DRILL FROM 4,963 TO 5,110 (ROP 22.6' HR)WOB 13-20, DHRPM 125-135, MW 9.3, VIS 32, BG GAS 120, ROP SLOWED TO 12' HR FOR 1 1/2 HR.S
	12:30 - 13:00	0.50	RIG	1	DRLIN1	RIG SERVICE, GREASE CROWN, BLOCKS, SWIVEL, DRAWWORKS
	13:00 - 14:30	1.50	DRL	1	DRLIN1	DRILL FROM 5,110 TO 5,122 (ROP 8' HR) WORK ALL DIFFERANT PERAMETERS COULDN'T GET TO DRILL
	14:30 - 15:00	0.50	SUR	1	DRLIN1	CHECKED FLOW--NO FLOW AND DROP SURVEY @ 5,070
	15:00 - 16:30	1.50	TRP	10	DRLIN1	TRIP OUT OF HOLE
	16:30 - 17:00	0.50	TRP	1	DRLIN1	LAY DOWN MOTOR AND BIT AND PICK UP SAME
	17:00 - 19:00	2.00	TRP	10	DRLIN1	TRIP IN HOLE FILL @ BHA AND 5,011
	19:00 - 19:30	0.50	REAM	1	DRLIN1	WASH FROM 5,011 TO 5,122 (NO HOLE FILL)
9/16/2008	19:30 - 06:00	10.50	DRL	1	DRLIN1	DRILL FROM 5,122 TO 5310 (ROP 17.9' HR) WOB 12-18, DHRPM 135-155, MW 9.3, VIS 32, HAVE HAD ALOT OF SLIP STICK WITH NEW BIT AND MOTOR--HAVE TRIED DIFFERENT PERAMETERS TO GET SLIP STICK OUT-NO LUCK
	06:00 - 11:00	5.00	DRL	1	DRLIN1	DRILL FROM 5,310 TO 5,450 (ROP 28' HR) WOB 12-16, DHRPM 125-135, MW 9.3, VIS 32, HAD ALOT OF SLIP STICK
	11:00 - 12:00	1.00	CIRC	7	DRLIN1	CIRCULATE UP FORMATION SAMPLE, FIRM SHALE- GEO-DON WEAVER
	12:00 - 13:00	1.00	TRP	14	DRLIN1	SHORT TRIP FOR 9 5/8 CASING RUN, NO HOLE FILL
	13:00 - 14:00	1.00	CIRC	1	DRLIN1	CIRCULATE BOTTOMS UP TO RUN CASING-SHAKER WERE CLEAN,
	14:00 - 14:30	0.50	SUR	1	DRLIN1	FLOW CHECK AND DROP SURVEY @ 5378.8 DEG, 182.5 AZ
	14:30 - 16:30	2.00	TRP	2	DRLIN1	TRIP OUT OF HOLE TO RUN CASING (SLM 5450.57)
	16:30 - 17:30	1.00	TRP	1	DRLIN1	LAY DOWN 8" COLLARS AND MOTOR
	17:30 - 18:00	0.50	OTH		DRLIN1	PULL WEAR BUSHING
	18:00 - 19:30	1.50	CSG	1	CSGIN1	HELD SAFETY MEETING AND RIG UP CASING CREW
	19:30 - 00:30	5.00	CSG	2	CSGIN1	RUN 9 5/8 123 JOINTS, 47#, HCP110, CASING AS FOLLOWS SHOE @ 5439, FLOAT COLLAR @ 5354, RAN 25 CENTRALIZERS EVERY 120'+/- LANDED HANGER
	00:30 - 01:30	1.00	CSG	1	CSGIN1	R/D CASING CREW WHILE CIRCULATING
	01:30 - 02:30	1.00	CIRC	1	CSGIN1	CIRCULATE HOLE THRU FLUTED HANGER
02:30 - 05:30	3.00	OTH		CSGIN1	PACK OFF WELL HEAD AND SET CEMENT ISOLATION TOOL TO CEMENT THRU "A" SECTION	
9/17/2008	05:30 - 06:00	0.50	CIRC	1	CSGIN1	CIRCULATE CASING THRU "A" SECTION TO CEMENT
	06:00 - 09:00	3.00	CIRC	1	CSGIN1	CIRCULATE CASING THRU A SECTION FOR CEMENT JOB,(FOAMING PUMPS NOT WORKING ON FOAMING TRAILER, FOUND @ 07:15
	09:00 - 14:30	5.50	CMT	2	CSGIN1	HELD SAFETY MEETING & RIG UP AND CEMENT 9 5/8 CASING PUMPED 50 BBL.S OF SPACER TRAIN, 30 BBL.S OF SCAVENGER CEMENT 7 PPG, 165 BBL.S FIRST LEAD 8.5 PPG, 210 BBL.S OF 2ND LEAD 11 PPG, 62 BBL.S OF TAIL CEMENT 14.3 PPG, DIPLACED WITH 392 BBL.S OF 9.3 MUD, LOST RETURNS 200 BBL.S INTO DIS PLACEMENT, PLUG BUMPED AND FLOATS HELD, PUMPED 55 BBL.S OF CAP 14.6 PPG
	14:30 - 15:30	1.00	CMT	1	CSGIN1	RIG DOWN CEMENTERS
	15:30 - 16:00	0.50	OTH		CSGIN1	PULL CEMENT ISOLATION TOOL

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9/17/2008	16:00 - 20:30	4.50	BOP	2	CSGIN1	RIG UP TESTERS AND TEST BOPE TO 10,000 PSI
	20:30 - 21:00	0.50	TRP	1	CSGIN1	PICK UP MOTOR AND MONEL
	21:00 - 23:30	2.50	TRP	2	CSGIN1	TRIP IN HOLE FILL @ BHA AND @ 5,329
	23:30 - 00:30	1.00	DRL	4	CSGIN1	DRILL FLOAT COLLAR AND SHOE
	00:30 - 01:30	1.00	DRL	1	CSGIN1	DRILL FROM 5450 TO 5460 10' OF NEW HOLE FOR FIT TEST
	01:30 - 02:00	0.50	EQT	2	CSGIN1	PERFORM FIT TEST MW 9.3PPG + 1205 PSI = 13.54 EQUIV. MW
	02:00 - 06:00	4.00	DRL	1	CSGIN1	DRILL FROM 5,460 TO 5,521 (ROP 15.3' HR) WOB 5-20, DHRPM 140-160, MW 9.3 VIS 32, BG GAS
	9/18/2008	06:00 - 10:30	4.50	DRL	1	DRLIN2
10:30 - 11:00		0.50	RIG	1	DRLIN2	RIG SERVICE
11:00 - 21:30		10.50	DRL	1	DRLIN2	DRILL FROM 5614' TO 5741' (ROP 12' HR)
21:30 - 22:00		0.50	SUR	1	DRLIN2	DROP SURVEY
22:00 - 00:30		2.50	TRP	10	DRLIN2	PUMP TRIP SLUG TRIP OUT OF HOLE
00:30 - 01:00		0.50	TRP	1	DRLIN2	CHANGE OUT BIT
01:00 - 03:30		2.50	TRP	10	DRLIN2	TRIP IN HOLE WITH NEW BIT- FILL @ BHA AND 5,615
03:30 - 04:00		0.50	REAM	1	DRLIN2	WASH FROM 5,615 TO 5,741 (NO FILL)
04:00 - 06:00		2.00	DRL	1	DRLIN2	DRILL FROM 5,741 TO 5,800 (ROP 29.5' HR) WOB 5-8, DHRPM 160-175, MW 9.3, VIS 36, BG GAS 31,
9/19/2008		06:00 - 15:30	9.50	DRL	1	DRLIN2
	15:30 - 16:00	0.50	RIG	1	DRLIN2	SERVICE RIG-- TOP DRIVE, BLOCKS, SWIVEL
	16:00 - 19:00	3.00	TRP	10	DRLIN2	TRIP OUT OF HOLE TO CHANGE BIT AND CBL LOGS
	19:00 - 19:30	0.50	LOG	2	DRLIN2	HELD SAFETY MEETING AND RIG UP CUTTERS WIRE LINE
	19:30 - 22:00	2.50	LOG	2	DRLIN2	LOG CASING TOP OF CEMENT @ 1910
	22:00 - 22:30	0.50	LOG	2	DRLIN2	RIG DOWN LOGERS
	22:30 - 23:00	0.50	TRP	1	DRLIN2	PICK UP BIT SUB, TORQUE BUSTER, BIT
	23:00 - 01:30	2.50	TRP	10	DRLIN2	TRIP IN HOLE FILL @ BHA AND 5,776
	01:30 - 02:00	0.50	REAM	1	DRLIN2	WASH FROM 5,776 TO 5,908-HOLE IS GOOD SHAPE 2' FILL
	02:00 - 06:00	4.00	DRL	1	DRLIN2	DRILL FROM 5,908 TO 5,988 (ROP 20' HR) WOB 7.5, DHRPM 75, MW 9.4, VIS 45, BG GAS 65
9/20/2008	06:00 - 10:00	4.00	DRL	1	DRLIN2	DRILL FROM 5,988 TO 6,063 (ROP 18.8' HR) WOB 5-7, DHRPM 65, MW 9.4, VIS 32, BG GAS 31, HOLE SEEPING 4 BBL.S HR
	10:00 - 11:00	1.00	RIG	1	DRLIN2	SERVICE RIG TOP DRIVE, BLOCKS, SWIVEL, DRAW TOOL, CROWN
	11:00 - 18:00	7.00	DRL	1	DRLIN2	DRILL FROM 6,063 TO 6,240 (ROP 25.3' HR) WOB 5-8, DHRPM 85, MW 9.5, VIS 37, BG GAS 32, HOLE SEEPING 4 BBL.S HR
	18:00 - 02:30	8.50	DRL	1	DRLIN2	DRILL FROM 6,240 TO 6,445 (ROP 24.1' HR) HOLE TOOK A 205 BBL DRINK @ 6239 LOST ALL RETURNS AND REGAIN AFTER PUMPING 10% LCM SWEEP 200 BBL.S HOLE IS SEEPING 15 BBL.S HR
	02:30 - 03:00	0.50	SUR	1	DRLIN2	SURVEY @ 6403 1.5 DEG 148.9 AZ
	03:00 - 06:00	3.00	DRL	1	DRLIN2	DRILL FROM 6,445 TO 6,518 (ROP 24.3' HR) WOB 7-9, DHRPM 85, MW 9.5, VIS 39, BG GAS 15, HOLE SEEPING 8 BBL.S HR
9/21/2008	06:00 - 11:30	5.50	DRL	1	DRLIN2	DRILL FROM 6,518 TO 6,635 (ROP 21.3' HR) WOB 7-10 DHRPM 75, MW 9.5, VIS 38, BG GAS 16 HOLE SEEPING 6 BBL.S HR
	11:30 - 12:30	1.00	RIG	1	DRLIN2	SERVICE RIG BLOCKS, SWIVEL, DRAWWORKS, TOP DRIVE
	12:30 - 18:00	5.50	DRL	1	DRLIN2	DRILL FROM 6,635 TO 6,745 (ROP 20.0' HR) WOB 7-13 DHRPM 75-90, MW 9.5, VIS 40, BG GAS 38 HOLE SEEPING 4 BBL.S HR PUMPING 10 BBL. 10% LCM SWEEPS HRLY
	18:00 - 06:00	12.00	DRL	1	DRLIN2	DRILL FROM 6,745 TO 7,000 (ROP 21.3' HR) WORKING THE SAME PERAMETERS
9/22/2008	06:00 - 12:00	6.00	DRL	1	DRLIN2	DRILL FROM 7,000 TO 7,110 (ROP 18.3' HR) WOB 13-15, DHRPM 90, MW 9.5, VIS 39, HOLE STARTED SEEPING 14 BBL.S HR @ 7,090

**Operations Summary Report**

Legal Well Name: GH 6-20-8-21  
 Common Well Name: GH 6-20-8-21  
 Event Name: DRILLING  
 Contractor Name: PRO-PETRO  
 Rig Name: INGERSOL RAND  
 Start: 8/24/2008  
 Rig Release: 8/24/2008  
 Rig Number: 6  
 Spud Date: 8/22/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/22/2008	12:00 - 12:30	0.50	RIG	1	DRLIN2	SERVICE RIG
	12:30 - 14:00	1.50	DRL	1	DRLIN2	DRILL FROM 7,110 TO 7,135 (ROP 16.7' HR) WOB 15, DHRPM 90, MW 9.5, VIS 38 LOST DRILL PIPE SCREEN ON CONNECTION-SCREEN WENT DOWN DRILL PIPE
	14:00 - 16:30	2.50	TRP	10	DRLIN2	TRIP OUT FOR BIT, 16 BBL.S OVER CALC. FILL
	16:30 - 17:30	1.00	TRP	1	DRLIN2	LAY DOWN TORQUE BUSTER, BIT SUB, 2-DC'S, PICK UP NEW MOTOR AND BIT
	17:30 - 20:30	3.00	TRP	10	DRLIN2	TRIP IN HOLE RABBITING PIPE LOOKING FOR DRILL PIPE SCREEN- FOUND IN SECOND HWDP FROM TOP- FILL @ BHA AND SHOE
	20:30 - 21:30	1.00	RIG	6	DRLIN2	CUT AND SLIP 10 WRAPS OF DRILLING LINE
	21:30 - 22:30	1.00	TRP	10	DRLIN2	TRIP IN OPEN HOLE
	22:30 - 23:00	0.50	REAM	1	DRLIN2	WASH FROM 6952 TO 7135 (NO HOLE FILL)
	23:00 - 06:00	7.00	DRL	1	DRLIN2	DRILL FROM 7,135 TO 7,317 (ROP 26' HR) WOB 7-8, DHRPM 145, MW 9.6, VIS 41, BGGAS 44
	9/23/2008	06:00 - 11:00	5.00	DRL	1	DRLIN2
11:00 - 12:00		1.00	SUR	1	DRLIN2	CIRCULATE AND SURVEY @ 7,370 1.6 DEG 159.7 AZ
12:00 - 16:00		4.00	DRL	1	DRLIN2	DRILL FROM 7,430 TO 7,525 (ROP 23.8' HR) WORK SAME PERRAMETERS
16:00 - 16:30		0.50	RIG	1	DRLIN2	SERVICE RIG AND TOP DRIVE
16:30 - 06:00		13.50	DRL	1	DRLIN2	DRILL FROM 7,525 TO 7,865 (ROP 25.2' HR) WOB 8-12, DHRPM 145, MW 9.5, VIS 38, BGGAS 27 ERATIC DRILLING @ 7538 BIT BOUNCE AND TORQUE SMOOTH 7,569
9/24/2008	06:00 - 10:30	4.50	DRL	1	DRLIN2	DRILL FROM 7,865 TO 8,003 (ROP 30.7' HR) WOB 14, DHRPM 145, MW 9.5, VIS 38, BG GAS 31
	10:30 - 11:30	1.00	RIG	1	DRLIN2	SERVICE RIG BLOCKS, DRAWWORKS, SWIVEL, TOP DRIVE
	11:30 - 18:00	6.50	DRL	1	DRLIN2	DRILL FROM 8,003 TO 8,190 (ROP 26.7' HR) WOB 14, DHRPM 145, MW 9.5, 39, BG GAS 23, NO LOSSES
9/25/2008	18:00 - 06:00	12.00	DRL	1	DRLIN2	DRILL FROM 8,190 TO 8,400 (ROP 17.5' HR) WOB 14-18, DHRPM 145, MW 9.5, NO LOSSES
	06:00 - 09:30	3.50	DRL	1	DRLIN2	DRILL F/ 8400' TO 8479' ( 79' @ 23' P/HR ) WOB 18/22 MUD WT 9.5 PPG VIS 36 W/ NO LOSSES
	09:30 - 10:30	1.00	CIRC	1	DRLIN2	CIR BOTTOMS UP & WIRE LINE SURVEY 1* DEG. 152.3 AZI
	10:30 - 15:00	4.50	DRL	1	DRLIN2	DRILL F/ 8479' TO 8573' ( 94' @ 21; P/HR ) WOB 18/22 MUV WT 9.6 PPG VIS 39 W/ NO LOSSES
	15:00 - 15:30	0.50	RIG	1	DRLIN2	RIG SERVICE
	15:30 - 18:00	2.50	DRL	1	DRLIN2	DRILL F/ 8573' TO 8628' ( 55' @ 22' P/HR ) WOB 18/22 MUD WT 9.6 PPG VIS 39 W/ NO LOSSES
	18:00 - 01:30	7.50	DRL	1	DRLIN2	DRILL F/ 8628' TO 8763' ( 135' @ 19' P/HR ) WOB 18/22 MUD WT 9.6 PPG VIS 38
	01:30 - 02:00	0.50	CIRC	1	DRLIN2	CIR & CHANGE OUT LEAKING ROTATING RUBBER
	02:00 - 06:00	4.00	DRL	1	DRLIN2	DRILL F/ 8763' TO 8859' ( 96' @ 24' P/HR ) WOB 18/22 MUD WT 9.6 PPG VIS 40
	9/26/2008	06:00 - 10:00	4.00	DRL	1	DRLIN2
10:00 - 10:30		0.50	RIG	1	DRLIN2	RIG SERVICE
10:30 - 14:30		4.00	DRL	1	DRLIN2	DRILL F/ 8954' TO 9046' ( 92' @ 23' P/HR ) WOB 20/22 MUD WT 9.6 PPG VIS 40
14:30 - 15:30		1.00	CIRC	1	DRLIN2	CIR. BOTTOMS UP & FLOW CHECK OK DROP SURVEY
15:30 - 18:00		2.50	TRP	2	DRLIN2	TRIP OUT OF HOLE
18:00 - 22:00		4.00	ISP	1	DRLIN2	INSPECT BHA & CHANGE OUT MUD MOTOR & BIT
	22:00 - 04:30	6.50	TRP	2	DRLIN2	TRIP IN HOLE TO 8854'

### Operations Summary Report

Legal Well Name: GH 6-20-8-21  
 Common Well Name: GH 6-20-8-21  
 Event Name: DRILLING  
 Contractor Name: PRO-PETRO  
 Rig Name: INGERSOL RAND

Start: 8/24/2008  
 Rig Release: 8/24/2008  
 Rig Number: 6

Spud Date: 8/22/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/26/2008	04:30 - 05:00	0.50	REAM	1	DRLIN2	SAFETY WASH & REAM F/ 8854' TO BOTTOM @ 9046 W/ NO PROBLEMS OR FILL
	05:00 - 06:00	1.00	DRL	1	DRLIN2	DRILL F/ 9046' TO 9066' ( 20' @ 20 P/HR ) WOB 15/18 MUD WT 9.6 PPG VIS 41
9/27/2008	06:00 - 11:00	5.00	DRL	1	DRLIN2	DRILL F/ 9066' TO 9157' ( 91' @ 18.2 P/HR ) WOB 18/25 MUD WT 9.8 PPG VIS 43
	11:00 - 11:30	0.50	CIRC	1	DRLIN2	FLOW CHECK - OK & PUMP PILL
	11:30 - 15:00	3.50	TRP	2	DRLIN2	TOOH CHANGE MUD MOTOR & BIT
	15:00 - 19:30	4.50	TRP	2	DRLIN2	TRIP IN HOLE
	19:30 - 20:00	0.50	REAM	1	DRLIN2	SAFETY WASH & REAM F/ 8967' TO BOTTOM @ 9157' W/ NO FILL
	20:00 - 06:00	10.00	DRL	1	DRLIN2	DRILL F/ 9157' TO 9415' ( 258' @ 26' P/HR ) WOB 15/20 MUD WT 9.9 VIS 42 W/ NO LOSSES
9/28/2008	06:00 - 11:30	5.50	DRL	1	DRLIN2	DRILL F/ 9415' TO 9528' ( 113' @ 21' P/HR ) WOB 18/22 MUD WT 9.9 PPG VIS 41
	11:30 - 12:00	0.50	RIG	1	DRLIN2	RIG SERVICE
	12:00 - 06:00	18.00	DRL	1	DRLIN2	DRILL F/ 9528' TO 9967' ( 439' ( 25' P/HR ) WOB 18/22 MUD WT 10 PPG VIS 42
9/29/2008	06:00 - 09:00	3.00	DRL	1	DRLIN2	DRILL F/ 9967' TO 10057' ( 90' @ 30' P/HR ) WOB 18/22 MUD WT 10.2 PPG VIS 41
	09:00 - 11:00	2.00	CIRC	2	DRLIN2	LOST PARTIAL RETURNS PUMP 50 BBLS 20% LCM PILL RE-GAIN RETURNS LOST TOTAL OF 240 BBLS
	11:00 - 12:30	1.50	DRL	1	DRLIN2	DRILL F/ 10057' TO 10102' ( 45' @ 30' P/HR ) WOB 18/22 MUD WT 10.2 PPG VIS 43
	12:30 - 13:00	0.50	RIG	1	DRLIN2	RIG SERVICE
	13:00 - 21:00	8.00	DRL	1	DRLIN2	DRILL F/ 10102' TO 10311' ( 209' @ 26' P/HR ) WOB 18/22 MUD WT 10.6 PPG VIS 42 ( # 1 SCR DOWN UNABLE TO DRILL WITH ONE MUD PUMP ) ELECTRICAN SHOULD BE ON LOCATION AROUND 0800 HRS )
	21:00 - 01:00	4.00	RIG	2	DRLIN2	CIR. & CONDITION MUD PUMP ECD PILL
9/30/2008	01:00 - 03:30	2.50	RIG	2	DRLIN2	TRIP TO CASING SHOE
	03:30 - 06:00	2.50	RIG	2	DRLIN2	WAIT ON ELECTRICAN
	06:00 - 15:30	9.50	RIG	2	DRLIN2	REPAIR # 1 SCR FOUND DAMAGED WIRE GOING TO RE-TRACTING MOTOR CAUSING GROUND FAULT REPAIRED RIH ( STAGE CIR. OUT ECD PILL )
	15:30 - 16:00	0.50	RIG	1	DRLIN2	RIG SERVICE
	16:00 - 06:00	14.00	DRL	1	DRLIN2	DRILL F/ 10311' TO 10600' ( 289' @ 21' P/HR ) WOB 20/25 MUD WT 11 PPG VIS 42
10/1/2008	06:00 - 08:00	2.00	DRL	1	DRLIN2	DRILL F/ 10600 TO 10614' ( 14' @ 7'P/HR ) WOB 18/26 MUD WT 11 PPG VIS 42
	08:00 - 09:30	1.50	CIRC	1	DRLIN2	CIR. BOTTOMS UP FLOW CHECK DROP SURVEY & PUMP ECD PILL
	09:30 - 13:00	3.50	TRP	2	DRLIN2	TRIP OUT OF HOLE
	13:00 - 13:30	0.50	TRP	1	DRLIN2	CHANGE OUT MUD MOTOR & BIT
	13:30 - 18:30	5.00	TRP	2	DRLIN2	TRIP IN HOLE TO 8255'
	18:30 - 19:30	1.00	REAM	1	DRLIN2	TIGHT HOLE @ 10390' WASH & REAM THROUGH TIGHT SPOT & REAM TO BOTTOM @ 10614'
10/2/2008	19:30 - 06:00	10.50	DRL	1	DRLIN2	DRILL F/ 10614' TO 10930' ( 316' @ 30' P/HR ) WOB 18/24 MUD WT 11.1 PPG VIS 43
	06:00 - 11:30	5.50	DRL	1	DRLIN2	DRILL F/ 10930 TO 10982 ( 52' @ 9.6' P/HR ) WOB 20/25 MUD WT 11.3 VIS 42
	11:30 - 12:30	1.00	CIRC	1	DRLIN2	CIR. BOTTOMS UP & PUMP ECD PILL
	12:30 - 18:00	5.50	TRP	2	DRLIN2	TOOH
	18:00 - 19:30	1.50	TRP	1	DRLIN2	LAY DOWN MUD MOTOR & PICK UP TORQUE BUSTER & NEW BIT

### Operations Summary Report

Legal Well Name: GH 6-20-8-21  
 Common Well Name: GH 6-20-8-21  
 Event Name: DRILLING  
 Contractor Name: PRO-PETRO  
 Rig Name: INGERSOL RAND

Start: 8/24/2008  
 Rig Release: 8/24/2008  
 Rig Number: 6

Spud Date: 8/22/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
10/2/2008	19:30 - 22:30	3.00	TRP	2	DRLIN2	TIH TO SHOE
	22:30 - 00:00	1.50	RIG	6	DRLIN2	CUT & SLIP DRILL LINE
	00:00 - 03:00	3.00	RIG	2	DRLIN2	REPAIR LEAK ON DRAWWORKS ( REPLACE COOLANT HOSE )
	03:00 - 05:00	2.00	TRP	2	DRLIN2	TRIP IN HOLE TO 10120
	05:00 - 06:00	1.00	CIRC	1	DRLIN2	CIR OUT ECD PILL

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Operations Summary Report

Legal Well Name: GH 6-20-8-21  
 Common Well Name: GH 6-20-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 8/24/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 8/22/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
11/2/2008	16:30 - 06:00	13.50	DRL	1	DRLPRO	BBLs IN FRACTURE 16867'
11/3/2008	06:00 - 07:00	1.00	CIRC	1	DRLPRO	CIRCULATE, PUMP DRY PIPE PILL, CHECK FOR FLOW
	07:00 - 13:00	6.00	TRP	10	DRLPRO	TRIP OUT BIT # 19
	13:00 - 13:30	0.50	TRP	1	DRLPRO	LAY DOWN TORQUE BUSTER AND CHANGE OUT BIT
	13:30 - 18:30	5.00	TRP	10	DRLPRO	TRIP TO SHOE
	18:30 - 19:30	1.00	RIG	6	DRLPRO	SLIP AND CUT DRILLING LINE
	19:30 - 20:00	0.50	RIG	1	DRLPRO	RIG SERVICE
	20:00 - 22:00	2.00	TRP	10	DRLPRO	TRIP IN BIT #20
	22:00 - 23:00	1.00	REAM	1	DRLPRO	WASH AND REAM LAST STD TO BOTTOM
	23:00 - 00:30	1.50	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP CHANGE OUT ROTATING HEAD RUBBER
11/4/2008	00:30 - 06:00	5.50	DRL	1	DRLPRO	DRILL F/16868' TO 16920' WOB 16, ROT 55, GPM 230
	06:00 - 21:00	15.00	DRL	1	DRLPRO	DRILL F/ 16,920 T/ 17,016. 96 FT, 6.4 FPH DRILLED INTO FRACTURE @ 17,013, STALLED WHEN ATTEMPTING T/ RESTART. DRILLED T/ 17,016.
	21:00 - 22:00	1.00	SUR	1	DRLPRO	DROP SURVEY. ATTEMPT T/ PUMP SLUG. STRING PRESSURED UP, NO CIRCULATION. CHECK SURFACE EQUIPMENT, DP SCREEN, ETC. N/G
	22:00 - 02:00	4.00	FISH	4	DRLPRO	WAIT ON WIRELINE TRUCK
	02:00 - 06:00	4.00	FISH	4	DRLPRO	SAFETY MEETING, R/U D.C.T. WIRELINE & RIH W/ SURVEY RETRIEVING TOOL
11/5/2008	06:00 - 09:30	3.50	FISH	4	DRLPRO	RIH W/ DCT WIRELINE. ATTEMPT TO JAR MULTI-SHOT SURVEY TOOL FREE. NO PROGRESS. POH.
	09:30 - 16:30	7.00	FISH	4	DRLPRO	MK UP 5 SHOT 1/4" PERF GUN. RIH. PERF GUN DID NOT FIRE. MK UP 9 SHOT 1/8" PERF GUN. RIH. PERFORATE 1ST DRILL COLLAR ABOVE MONEL.
	16:30 - 17:00	0.50	FISH	4	DRLPRO	R/D W/L TRUCK.
	17:00 - 17:30	0.50	REAM	2	DRLPRO	WASH 130 FT T/ BTM.
	17:30 - 19:30	2.00	CIRC	1	DRLPRO	CIRCULATE / CONDITION @ 4.8 BPM. 6,590 UNITS, 35 FT FLARE.
	19:30 - 02:30	7.00	TRP	10	DRLPRO	PUMP SLUG. TOH F/ NEW BIT.
	02:30 - 06:00	3.50	TRP	1	DRLPRO	L/D PERFORATED DC, WIRELINE TOOLS & REMOVE SURVEY TOOL F/ BIT SUB
11/6/2008	06:00 - 14:00	8.00	TRP	10	DRLPRO	TRIP IN HOLE FILL EVERY 5 ROWS, BREAK CIRCULATION FOR 5-10 MINUTES
	14:00 - 15:00	1.00	CIRC	1	DRLPRO	CIRCULATE OUT TRIP SLUG
	15:00 - 16:00	1.00	TRP	10	DRLPRO	TRIP IN HOLE TO 16,855 TO
	16:00 - 17:00	1.00	OTH		DRLPRO	INSTALL ROTATING HEAD AND CHANGE OUT ROTATING HEAD
	17:00 - 18:00	1.00	REAM	1	DRLPRO	WASH FROM 16,855 TO 17,016 (NO HOLE FILL)
	18:00 - 01:30	7.50	DRL	1	DRLPRO	DRILL 17,016 TO 17,070 (ROP 7.2' HR) WOB 14, DHRPM 52, MW 14.9, VIS 49, BG GAS 380
	01:30 - 03:00	1.50	CIRC	5	DRLPRO	CIRCULATE UP SAMPLE
	03:00 - 04:00	1.00	TRP	14	DRLPRO	SHORT TRIP 10 STANDS
11/7/2008	04:00 - 06:00	2.00	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP AND SPOT ECD SLUG
	06:00 - 06:30	0.50	CIRC	1	DRLPRO	SPOT ECD SLUG 150 BBL.S OF 15.8 PPG IN OPEN HOLE
	06:30 - 14:00	7.50	TRP	2	DRLPRO	TRIP OUT OF TO LOG HOLE
	14:00 - 06:00	16.00	LOG	1	DRLPRO	RUN OPEN HOLE LOGGS, PLAT FORM EXPRESS, OBMI LOG, IN CASING SONIC, NEUTRON LOG IN CASING FROM SHOE TO 5,000' AND GAMMA RAY FROM SHOE TO SURFACE
11/8/2008	06:00 - 09:30	3.50	LOG	2	DRLPRO	LOG SONIC/
	09:30 - 16:00	6.50	TRP	15	DRLPRO	TRIP IN HOLE TO SHOE
	16:00 - 17:00	1.00	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP @ SHOE
	17:00 - 19:30	2.50	TRP	15	DRLPRO	TRIP IN HOLE TO 16,986
	19:30 - 20:00	0.50	REAM	1	DRLPRO	WASH FROM 16,986 TO 17,070 (NO FILL)

**Operations Summary Report**

Legal Well Name: GH 6-20-8-21  
 Common Well Name: GH 6-20-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 8/24/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 8/22/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
11/8/2008	20:00 - 23:30	3.50	CIRC	1	DRLPRO	CIRCULATE OUT ECD SLUG AND CONDITION HOLE TO RUN CASING (LOST 70 BBL.S CIRCULATING OUT ECD SLUG @ SLOW PUMP RATE, PUMP TRIP SLUG 75 BBL.S 15.5
	23:30 - 01:00	1.50	TRP	2	DRLPRO	TRIP OUT TO CASING SHOE TO LAY DOWN DRILL PIPE HOLE TOOK ONLY 4 BBL.S OF FILL, CHECK FOR FLOW @ 13,900 AND 11950--NO FLOW BOTH TIMES
	01:00 - 04:00	3.00	CIRC	1	DRLPRO	RIG UP L/D TRUCK--CHECKED FLOW BEFORE L/D DRILL PIPE, WELL FLOWING 1/4" STREAM, CIRCULATE BOTTOMS UP @ SHOE AND SPOT ECD SLUG(98 BBL.S 15.9PPG)
	04:00 - 04:30	0.50	TRP	3	DRLPRO	LAY DOWN 24 JT'S 4" DP (STOP AND CHECK FOR FLOW)
	04:30 - 05:00	0.50	OTH		DRLPRO	MONITOR WELL FOR FLOW WELL FLOWING 7 BBL.S HR, FLOW NOT SLOWING DOWN (POSSIBLE BALLONING)
11/9/2008	05:00 - 06:00	1.00	TRP	1	DRLPRO	PICK UP 24 JT'S DRILL PIPE, AND RUN IN HOLE WITH STANDS IN DERRICK
	06:00 - 06:30	0.50	TRP	1	DRLPRO	PICK UP JT'S DRILL PIPE (WELL FLOWING)
	06:30 - 08:00	1.50	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP @ SHOE (11,963) PEAK GAS 9087 UNITS, 6' FLARE
	08:00 - 09:00	1.00	TRP	2	DRLPRO	TRIP IN HOLE 27 STANDS (HALF WAY IN OPEN HOLE)
	09:00 - 10:30	1.50	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP @ 14,561 PEAK GAS 6,945 UNIT'S, 12' FLARE
	10:30 - 11:30	1.00	TRP	2	DRLPRO	TRIP IN HOLE TO 17,070
	11:30 - 15:00	3.50	CIRC	1	DRLPRO	CIRCULATE BOTTOM S UP AND SPOT ECD SLUG (160 BBL.S 16.0 PPG) PEAK GAS 6,692 UNITS, 6' FLARE
	15:00 - 17:30	2.50	TRP	2	DRLPRO	TRIP OUT TO SHOE TO L/D DRILL PIPE 54 STANDS
	17:30 - 01:00	7.50	TRP	3	DRLPRO	LAY DOWN 4" DRILL PIPE
	01:00 - 01:30	0.50	OTH		DRLPRO	FIX DRILLING LINE RATS NEST ON DRUM
11/10/2008	01:30 - 03:00	1.50	TRP	2	DRLPRO	TRIP IN HOLE 54 STANDS OUT OF DERRICK
	03:00 - 06:00	3.00	TRP	3	DRLPRO	LAY DOWN 4" DRILL PIPE
	06:00 - 09:30	3.50	TRP	3	DRLPRO	LAY DOWN 4" DRILL PIPE AND BHA
	09:30 - 10:30	1.00	OTH		DRLPRO	PULL WEAR BUSHING
	10:30 - 12:00	1.50	CSG	1	DRLPRO	RIG UP CASING CREW (ROCKY MOUNTAIN)
	12:00 - 21:00	9.00	CSG	2	DRLPRO	RUN 4 1/2" CASING TO CASING SHOE 11,
	21:00 - 21:30	0.50	OTH		DRLPRO	INSTALL ROTATING HEAD RUBBER
	21:30 - 22:30	1.00	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP @ SHOE
	22:30 - 23:30	1.00	CSG	2	DRLPRO	RUN 4 1/2 CASING TO 14,519
	23:30 - 01:00	1.50	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP @ 14,519 BACK GROUND GAS 4835 UNITS, 20' FLARE
11/10/2008	01:00 - 01:30	0.50	OTH		DRLPRO	CHANGE OUT PACKER ON FILL TOOL
	01:30 - 03:30	2.00	CSG	2	DRLPRO	RUN 4 1/2" CASING TO BOTTOM TAGGED BOTTOM AND LAND CASING 2' OFF BOTTOM 17,068
	03:30 - 04:30	1.00	CSG	1	DRLPRO	RIG DOWN CASING CREW
	04:30 - 06:00	1.50	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP @ 14,068 @ 30 STRKS, PUMPING SLOW MUD SEEPING
	11/11/2008	06:00 - 07:00	1.00	CIRC	1	DRLPRO
07:00 - 07:30		0.50	CSG	1	DRLPRO	RIG DOWN CASING FILL TOOL
07:30 - 08:00		0.50	CMT	1	DRLPRO	HOLD SAFETY MEETING AND RIG UP CEMENTERS/CEMENT HEAD
08:00 - 11:30		3.50	CMT	2	DRLPRO	CEMENT 4 1/2 " CASING 40 BBL.S 15.0# TUNED SPACER, 222 BBL.S OF MNT "G" 15.2 CEMENT, DISPLACED 240 BBL.S OF CLAY FIX WATER, PLUG BUMPED AND HELD 20 MIN., FLOATS HELD (6.5 BBL.S BACK),
11:30 - 12:30		1.00	CMT	1	DRLPRO	RIG DOWN CEMENTERS
12:30 - 17:00	4.50	BOP	1	DRLPRO	PULL DRIP PANS, FLOW LINE, NIPPLE DOWN BOP, PICK UP BOPE LIFT RAILS IN SUB,	

**Operations Summary Report**

Legal Well Name: GH 6-20-8-21  
 Common Well Name: GH 6-20-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 8/24/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 8/22/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
11/11/2008	17:00 - 18:00	1.00	CSG	7	DRLPRO	SET SLIPS (220,000# IN SLIPS) ROUGH CUT CASING
	18:00 - 20:00	2.00	BOP	1	DRLPRO	SET BOPE DOWN AND NIPPLE DOWN BOPE, BREAK DOWN FOR RIG MOVE
	20:00 - 22:30	2.50	OTH		DRLPRO	RIG DOWN TOP DRIVE, BREAK ALL CONNECTIONS, L/D DOWN TONGS--ROTARY TOOLS
	22:30 - 02:30	4.00	BOP	1	DRLPRO	RIG UP STRONG BACK TO PICK UP BOPE, TAKE ROTATING HEAD OFF ANNULAR--WELL IS FLOWING 1/4" STREAM-PICK BOPE TO SET PACK OFF SET BOP DOWN, 750 PSI AND BACK SIDE OF 7" CASING
	02:30 - 06:00	3.50	OTH		DRLPRO	RIG DOWN TOP DRIVE AND RIG FLOOR (ROTARY TOOLS)/ MONITORING WELL 750 PSI ON CASING @ 0430 AM, 975 PSI @ 0600 AM
11/12/2008	06:00 - 12:00	6.00	OTH		DRLPRO	RIG DOWN TOP DRIVE RAIL, SERVICE LOOP ON TOP DRIVE, CLEAN AROUND RIG PITS, SHAKERS
	12:00 - 06:00	18.00	LOC	4	DRLPRO	RIG DOWN RIG FLOOR, BRIDLE UP, BREAK LINES APART ON TANKS, PUMPS, PULL CORDS, KOOMY LINES, BREAK FLOW LINE, RAISE CAT-A-LEVER CAT WALK, RIG DOWN TUGGERS, CHOKE LINE, DRAIN CENTRIFACAL PUMPS
11/13/2008	06:00 - 18:00	12.00	LOC	4	RDMO	PULLED FLOOR PLATES. LAYED DN DERRICK, UNSTRUNG BLOCKS. PULL ELECTRICAL LINES AND BREAK LINES. PICK MUD CLEANING EQUIPMENT F/ MUD PITS. CLEANING OBM F/ RIG COMPONENTS. STAGED OUT FUEL TANK, MOTOR PACKAGE, TWO MUD TANKS, HOPPER HOUSE, PARTS HOUSE. ONE BED TRUCK, ONE POLE TRUCK AND ONE CRANE ON LOCATION. SECOND CRANE AND ROAD TRUCKS DUE ON LOCATION IN THE AM. NOTE: BLED OFF 1,200 PSI FROM BACK SIDE OF CASING, 0 PRESSURE.
11/14/2008	18:00 - 06:00	12.00	LOC	4	RDMO	WAIT ON DAYLIGHTS
	06:00 - 18:00	12.00	LOC	4	RDMO	SET DERRICK OFF FLOOR. FINISHED PULLING OUT BACK YARD. STEAM CLEANING RIG COMPONENTS. HAULED 13 LOADS T/ MESA. 98% RIGGED DN WILL UNSTACK SUBS, PULL BOP, AND UN PIN DERRICK TOMORROW
	18:00 - 06:00	12.00			RDMO	WAIT ON DAYLIGHTS

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## Operations Summary Report

Legal Well Name: GH 6-20-8-21  
 Common Well Name: GH 6-20-8-21  
 Event Name: COMPLETION  
 Contractor Name:  
 Rig Name:

Start: 11/18/2008  
 Rig Release:  
 Rig Number:

Spud Date: 8/22/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations	
11/18/2008	08:00 - 14:00	6.00	LOG	2	C-LOG	MIRU OWP ELU. MU AND RIH WITH CCL/GR/CBL/VDL LOGGING TOOLS AND TAG CORRELATED PBTD AT 17,046' (FC @ 17,066'). PRESSURE UP TO 4,000 PSI AND LOG UP TO 7,000'. BLEED PRESSURE TO ZERO AND POOH. RDMO ELU. EST. TOC AT 7,700'. BHT= 326*.	
11/29/2008	08:00 - 14:00	6.00	PERF	2	C-PERF	SPOT IPS FBE.	
11/30/2008	09:00 - 13:00	4.00	PERF	2	C-PERF	MIRU IPS FB AND OWP ELU. MU & RIH WITH 2.5" GUNS. SHOOT 90 HOLES FROM 16,527' TO 17,040'. 500 PSI WHEN GUNS WERE FIRED. 900 PSI WITH GUNS AT SURFACE.	
12/1/2008	13:00 - 19:00	6.00	STIM	2	C-STIM	MIRU HES FRAC EQUIPMENT.	
	06:00 - 07:30	1.50	STIM	3	C-STIM	FRAC STAGE #1 WITH 1,543 BBLS 35# HYBOR-G CARRYING 52,545 LBS 30/50 TLC AND 28,648 LBS 30/50 SINTERLITE SAND FROM .5 TO 4 PPA. AVG RATE= 47.8 BPM. AVG PSI= 10,106.	
	07:30 - 11:50	4.33	PERF	2	C-PERF	STAGE #2. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 16,390' WITH 8,000 PSI. SHOOT 42 HOLES FROM 15,781' TO 16,370'.	
	11:50 - 13:15	1.42	STIM	3	C-STIM	FRAC STAGE #2 WITH 2,428 BBLS SLICKWATER CARRYING 30,284 LBS 30/50 TLC AND 13,735 LBS 30/50 SINTERLITE SAND. AVG RATE= 43.6 BPM. AVG PSI = 10,670.	
	13:15 - 16:30	3.25	PERF	2	C-PERF	STAGE #3. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 15,690' WITH 8,500 PSI. SHOOT 42 HOLES FROM 14,891' TO 15,665'.	
	16:30 - 21:20	4.83	STIM	3	C-STIM	FRAC STAGE #3 WITH 2,223 BBLS SLICKWATER CARRYING 33,817 LBS 30/50 TLC SAND. AVG RATE= 37.4 BPM. AVG PSI= 10,953. SCREENED OUT IN 13 # STAGE. PLACED 17 SKS IN WELLBORE. FLOWED WELL BACK TO CLEAN OUT WELLBORE.	
	21:20 - 23:45	2.42	PERF	2	C-PERF	BACK WELL DOWN WITH 220 BBLS STAGE #4. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CBP. SET PLUG AT 14,800' WITH 8,300 PSI. SHOOT 42 HOLES FROM 14,013' TO 14,779'.	
	23:45 - 01:15	1.50	STIM	3	C-STIM	FRAC STAGE # 4 WITH 2,522 BBLS SLICKWATER CARRYING 42,501 LBS 30/50 TLC SAND. AVG RATE= 39.5 BPM. AVG PSI = 9,858.	
	01:15 - 03:20	2.08	PERF	2	C-PERF	STAGE #5. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 13,920' WITH 7,200 PSI. SHOOT 42 HOLES FROM 13,737' TO 13,898'.	
	03:20 - 04:45	1.42	STIM	3	C-STIM	FRAC STAGE # 5 WITH 2,840 BBLS SLICKWATER CARRYING 5,000 LBS 100 MESH & 42,111 LBS 30/50 TLC SAND. AVG RATE= 43.0 BPM. AVG PSI = 9,527.	
	04:45 - 07:00	2.25	PERF	2	C-PERF	STAGE #6. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CBP. SET PLUG AT 13,620' WITH 7,000 PSI. SHOOT 42 HOLES FROM 12,842' TO 13,598'.	
	12/2/2008	07:00 - 08:15	1.25	STIM	3	C-STIM	FRAC STAGE # 6 WITH 2,442 BBLS SLICKWATER CARRYING 22,800 LBS 30/50 WHITE AND 19,300 LBS 30/50 TLC SAND. AVG RATE= 43.3 BPM. AVG PSI = 8,031 .
		08:30 - 10:40	2.17	PERF	2	C-PERF	STAGE # 7 RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 12,730' WITH 5,800 PSI. SHOOT 36 HOLES FROM 12,157' TO 12,704'.
		10:40 - 11:55	1.25	STIM	3	C-STIM	FRAC STAGE #7 WITH 2,477 BBLS SLICKWATER CARRYING 25,600 LBS 30/50 WHITE AND 19,400 LBS 30/50 TLC SAND. AVG RATE= 45.2 BPM. AVG PSI = 6,975.
	11:55 - 13:30	1.58	PERF	2	C-PERF	STAGE #8. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 11,680' WITH 4,900 PSI. SHOOT 33 HOLES FROM 11,318' TO 11,650'.	

RECEIVED  
 JAN 06 2009

### Operations Summary Report

Legal Well Name: GH 6-20-8-21  
 Common Well Name: GH 6-20-8-21  
 Event Name: COMPLETION  
 Contractor Name:  
 Rig Name:

Start: 11/18/2008  
 Rig Release:  
 Rig Number:

Spud Date: 8/22/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
12/2/2008	13:30 - 15:50	2.33	STIM	3	C-STIM	FRAC STAGE #8 WITH 2,898 BBLS SLICKWATER CARRYING 57,600 LBS 30/50 WHITE AND 17,200 LBS 30/50 TLC SAND. AVG RATE= 46 BPM. AVG PSI = 6,300.
	15:50 - 16:20	0.50	PERF	2	C-PERF	STAGE #9. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CBP. SET PLUG AT 11,264' WITH 3,800 PSI. SHOOT 39 HOLES FROM 10,716' TO 11,230'.
	16:25 - 17:38	1.22	STIM	3	C-STIM	FRAC STAGE #9 WITH 2,887 BBLS SLICKWATER CARRYING 54,000 LBS 30/50 WHITE AND 13,100 LBS 30/50 TLC SAND. AVG RATE= 41 BPM. AVG PSI = 5,660.
	17:45 - 19:00	1.25	PERF	2	C-PERF	STAGE #10. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CBP. SET PLUG AT 10,455' WITH 3,700 PSI. SHOOT 30 HOLES FROM 10,209' TO 10,435'.
	19:17 - 20:30	1.22	STIM	3	C-STIM	FRAC STAGE #10 WITH 2,247 BBLS SLICKWATER CARRYING 35,426 LBS 30/50 WHITE AND 17,529 LBS 30/50 PRC SAND. AVG RATE= 40.5 BPM. AVG PSI = 5,252.
	20:30 - 21:30	1.00	PERF	2	C-PERF	STAGE #11. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 9,236' WITH 3,400 PSI. SHOOT 21 HOLES FROM 9,095' TO 9,219'.
	21:36 - 21:57	0.35	STIM	3	C-STIM	FRAC STAGE #11 WITH 658 BBLS SLICKWATER CARRYING 25,743 LBS 30/50 WHITE AND 13,808 LBS 30/50 PRC SAND. AVG RATE= 40 BPM. AVG PSI = 6,036.
	22:05 - 23:05	1.00	PERF	2	C-PERF	STAGE #12. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 7730' WITH 3,100 PSI. SHOOT 27 HOLES FROM 7,062' TO 7,712'.
	23:05 - 23:30	0.42	STIM	3	C-STIM	FRAC STAGE #12 WITH 754 BBLS SLICKWATER CARRYING 38,499 LBS 30/50 WHITE AND 26,020 LBS 20/40 PRC SAND. AVG RATE= 45.0 BPM. AVG PSI = 4,593.
	23:30 - 03:00	3.50	LOC	4	C-OTH	RDMO OWP ELU AND HES FRAC EQUIPMENT.
12/3/2008	06:00 - 19:30	13.50	DRL	6	C-STIM	MIRU IPS CTU, GCDOE AND SPIRIT FLUIDS. LOAD CT WITH 110* WATER. MU QES 2 7/8" MOTOR/JARS AND 3.55" 5-BLADE JUNK MILL. TEST STACK TO 8,000 PSI. RIH AND DRILL OUT 11 PLUGS IN 6.5 HOURS TO PBDT DEPTH OF 17,066'. PUMP FINAL SWEEP AND POOH. RDMO IPS CTU, GCDOE & SPIRIT FLUIDS.
12/4/2008	19:30 - 06:00	10.50	PTST	2	C-POST	FLOWING TO SALES THROUGH IPS FBE.
12/5/2008	19:30 - 06:00	10.50	PTST	2	C-POST	FLOWING TO SALES THROUGH IPS FBE.
12/6/2008	19:30 - 06:00	10.50	PTST	2	C-POST	FLOWING TO SALES THROUGH IPS FBE.
12/7/2008	06:00 - 06:00	24.00	PTST	2	C-POST	FLOWING TO SALES THROUGH IPS FBE. RDMO IPS FBE.

43-047-30662

Operations Summary Report - DRILLING

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations
8/25/2008	06:00 - 09:00	3.00	LOC	2	SPUD WELL ON 8-22-08 AT 17:00 HRS. DRILL 30" HOLE 80' DEEP AND SET 20" CONDUCTOR PIPE. CEMENT WITH READY MIX. PETE MARTIN RAT HOLE.
	09:00 - 18:30	9.50	DRL	9	HAMMER DRILL 17.5" HOLE TO 530' BLOW DOWN WELL.
	18:30 - 19:30	1.00	TRP	3	LAY DOWN DRILL STRING.
	19:30 - 22:00	2.50	CSG	2	RUN 12 JOINTS OF 13 3/8" J-55, 68#, BTC CASING AS FOLLOWS:SHOE AT 510', FLOAT COLLAR AT 465.47'. RAN 3 CENTRALIZERS FROM 500' TO 380' AND ONE AT 84'. NOTE: ALL MEASUREMENTS ARE FROM GROUND LEVEL. YOU WILL NEED CASING TEST WHEN YOU TEST BOP'S.
	22:00 - 23:00	1.00	CMT	2	CEMENT AS FOLLOWS: PUMP 80 BBL OF FRESH WATER AND 20 BBL OF GEL SPACER. LEAD CEMENT 15.8 PPG, 500 SK, 102 BBL, YEALD 1.15. GAL/SK 5, DISPLACE WITH 69 BBL OF FRESH WATER. PLUG BUMPED TO 800 PSI OK, FCP 300, FLOAT HELD. CEMENT TO SURFACE 24 BBL.
8/25/2008	23:00 - 06:00	7.00	WOT	1	WAIT ON CEMENT. CONTACT BLM MICHAEL LEE ON 8-21-2008 AT 14:15 HRS FOR SPUDDING ON 8-22-2008 AT 17:00 HRS. CONTACT UTAH STATE ON 8-21-2008 AT 14:30 HRS FOR SPUDDING ON 8-22-2008 AT 17:00 HRS. NOTIFIED WONSIT VALLEY AND RED WASH OFFICE FOR SPUDDING WELL. CONTACT BLM JAMIE SPARGER ON 8-23-2008 AT 23:00 HRS FOR RUNNING CASING AND CEMENT ON 8-24-2008 AT 16:00 HRS. LEFT VOICE MESSAGE.
	06:00 -				
9/3/2008	06:00 - 18:00	12.00	LOC	4	RIG DOWN TOP DRIVE RAIL, SERVICE LOOP RIG DOWN BOP LIFTER UNHOOK KOOMEY UNIT, LAY OVER DERRICK @ 1500 HRS, UNSPOOL DRAWWORKS TAKE WRAPS OFF OF DEAD MAN, REMOVE ROTARY DRIVELINE, UNBOLT ROTARY CHAIN, REMOVE CHOKE LINE R/D FLARE LINES & DRY SHAKER
9/4/2008	18:00 - 06:00	12.00	LOC	4	40% RIGGED DOWN & 20% RIG MOVED 0 % RIGGED UP
	06:00 - 18:00	12.00	LOC	4	RIG DOWN UNBRIDLE BLOCKS, LAY A LEGS OVER, UN-PIN DERRICK FOR RIG FLOOR REMOVE DOG HOUSES, RIG DOWN MOTOR PACKAGED, WATER TANKS PULL ELECTRICAL CABLES & SPOOL UP REMOVE TOP DRIVE MODULE HOUSE OFF SUB UNDO DRAWWORKS LEADS & REMOVE DRAWWORKS F/ FLOOR, R/D & MOVE GRASSHOPPER, DISASSEMBLY REMAINING SUB STRUCTURE, LOAD OUT BACK YARD & SOLID CONTROL EQUIPMENT ALL MOVE TO NEW LOCATION NIPPLE DOWN BOPS MOVE TO NEW LOCATION ON OLD LOCATION ( SUCTION TANK & ONE MUD TANK W/ CAMP & RIG OFFICES
9/4/2008	18:00 - 06:00	12.00	LOC	4	95% RIG PACKAGED OFF OF OLD LOCATION 15% RIGGED UP ON NEW LOCATION NOTE: DURING RIGGING UP UNITS MECHANIC & RIG MANAGER WILL CARRY OUT FULL INSPECTION ON DRAWWORKS
	06:00 - 18:00	12.00	LOC	4	PRESSURE WASH DERRICK DURING MOVING RIG & RIGGING UP SPOT SUB STRUCTURE & RIG UP FLOOR, RAISE A LEGS PIN SAME, PIN DERRICK TO RIG FLOOR SET TOP DRIVE HOUSE SET GAS BUSTER & BACK YARD MOVE CAMP & OFFICES COMPLETE RIG OFF OLD LOCATION @ 0900 HRS, & CAMP OFF OLD LOCATION @ 1400 HRS, CLEAN OLD LOCATION
9/5/2008	06:00 - 18:00	12.00	LOC	4	70 % RIGGING UP ON NEW LOCATION
	18:00 - 06:00	12.00	LOC	4	INSPECT DRAWWORKS FOUND LOW CLUTCH CHAIN ( ROLLER'S MISSING & SOME CRACK ) CHANGE OUT OIL FINISHED INSPECTION @ 1630 HRS, PICK UP DERRICK F/ HEAD RACK STRESS LOAD TEST FOR 30 MINUTES & RASIE DERRICK PIN TO A LEGS @ 1800 HRS. FULL INSPECTION WAS CARRIED OUT ON TOP DRIVE FOUND NO DEFECTS & INSPECTED ALL THREAD CONNECTION BY THIRD PARTY R/UP DRY SHAKER & CUTTING LINES TO
9/6/2008	06:00 - 18:00	12.00	LOC	4	
	18:00 - 06:00	12.00	LOC	4	

CONFIDENTIAL

### Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/6/2008	06:00 - 18:00	12.00	LOC	4	WASTE PIT HOOK UP ALL ELE. CABLE CHANGE OUT MAIN BLOWER IN SCR HOUSE ( MOTOR GOING BAD ) REPLACE HYDRAULIC CONTROL VALVE SYSTEM @ DRILLER CONSOLE OBSERVE DURING LAST WELL CONTROL VALVE WAS WASHING OUT CAUSING BREAK OUT CYLINDER NOT TO WORK PROPERLY R/UP KOOMEY LINES, WATER LINES, YELLOW DOG, STALLION OBM FARM TANKS, GROUND RODS, HOPPER HOUSE,
	18:00 - 06:00	12.00	LOC	4	80 % RIGGED UP PLAN IS TO CARRY OUT FULL INSPECTION ON MUD PUMPS DURING RIGGING UP TOP DRIVE & RAILS ( UNIT WILL HAVE THREE MECHANIC'S ON LOCATION @ 0800 HRS ) TO COMPLETE INSPECTIONS
9/7/2008	06:00 - 18:00	12.00	LOC	4	CALL GAYLAND RICH ( BLM ) ABOUT BOP TEST LEFT VOICE MESSAGE @ 12:30 HRS ON 9/6/08, CALL ON 9/5/08 LEFT MESSAGE @ 1430 HRS. R/UP & CARRY OUT INSPECTION ON BOTH MUD PUMPS & ENGINES BY UNITS MECHANIC FOUND NO DEFECTS START WATER CIRCULATION RUN KOOMEY HOSE, LAYDOWN CAT WALK BRIDLE DOWN, RIG UP DERRICK CLIMBER P/UP TOP DRIVE RAILS, HOOK UP SWIVEL, TOP DRIVE RIG UP SERVICE LOOP, HOOK UP TOP DRIVE TO TOP DRIVE HOUSE, PUT ON TURNBUCKLES FOR TOP DRIVE TRACK. 90% RIGGED UP
	18:00 - 06:00	12.00	LOC	4	REPLACE LOW CLUTCH DRAWWORKS CHAIN W/ AMERICAN CHAIN R/UP FLOW LINE ATT. TO TORQUE UP TOP DRIVE CONNECTIONS LOST COMMUNICATION W/ DRILLER CONSOLE & TOP DRIVE CALL OUT TECHICAN FOUND DAMAGED CABLE GOING TO TOP DRIVE INSTALL BELLS & ELEVATORS ON TOP DRIVE
9/8/2008	06:00 - 12:00	6.00	LOC	4	TORQUE UP BOPS CONNECTIONS & PREPARE TO TEST BOPS FUNCTION TEST BOPS & P/TEST BOPS W/ LOW 250 PSI & HIGH 5000 PSI
	12:00 - 14:30	2.50	BOP	1	INSTALL WEAR BUSHING & LOW PRESSURE ROTATING HEAD ASSEMBLY
	14:30 - 22:00	7.50	BOP	2	LAY OUT BHA & STRAP
	22:00 - 00:00	2.00	OTH	1	M/UP RE-TIP REED MILL TOOTH BIT 12 1/4" & PICK UP 12 1/4 BHA
9/9/2008	00:00 - 02:00	2.00	TRP	1	CONTINUE TO PICK UP 12 1/4 BHA TAG LANDING COLLAR @ 466' OBSERVE SPEAR LEAKING ON DRAWWORKS DRILLER SIDE
	02:00 - 06:00	4.00	TRP	1	CIR. BOTTOMS UP
	06:00 - 07:00	1.00	TRP	1	CUT & SLIP DRILLING & WAIT ON UNITS MECHANIC
	07:00 - 07:30	0.50	CIRC	1	REPAIR WATER LEAK ON DRAWWORKS CHANGE OUT SNUFFING BOX
	07:30 - 09:00	1.50	LOG	4	DRILL OUT SHOE TRACK & CIR. BOTTOMS UP
	09:00 - 13:30	4.50	RIG	2	FIT EQU. TO 10.5 PPG HOLD FOR 15 - MINUTES ( GOOD TEST )
	13:30 - 15:30	2.00	DRL	5	DRILL F/ 520' TO 570'
	15:30 - 16:00	0.50	EQT	2	CIR. BOTTOMS UP
	16:00 - 17:30	1.50	DRL	1	TRIP OUT HOLE TO PICK UP HOLE OPENER & 8 3/4 BIT & MOTOR
	17:30 - 18:00	0.50	CIRC	1	L/D 12 1/4 BIT & M/UP 8 3/4 BIT & MUD MOTOR W/ 12.25 HOLE OPENER & RIH
	18:00 - 19:00	1.00	TRP	2	DRILL F/ 570' TO 1280' 710' @ 84' P/HR WOB 10 TO 20 MUD WT 9 PPG VIS 29
	19:00 - 21:30	2.50	TRP	1	DRILL F/ 1280' TO 1578' 298' @ 75' P/HR WOB 10/20 MUD WT 9.0 PPG VIS 32
	21:30 - 06:00	8.50	DRL	1	CIR. BOTTOMS UP WIRE LINE ( .6 DEG. ) @ 1528'
	9/10/2008	06:00 - 10:00	4.00	DRL	1
10:00 - 10:30		0.50	CIRC	1	RIG SERVICE
10:30 - 15:00		4.50	DRL	1	DRILL F/ 1866' TO 2040' 174' @ 70' P/HR WOB 10/20 MUD WT 9.1 PPG VIS 32
15:00 - 15:30		0.50	RIG	1	RE-TIGHTEN ROTATING HOUSING ( LEAKING @ CONNECTION )
15:30 - 18:00		2.50	DRL	1	DRILL F/ 2040' TO 2089'
18:00 - 18:30		0.50	OTH	1	TOP DRIVE REPLACE PIN ON AN CYLINDER ARM
18:30 - 19:00		0.50	DRL	1	DRILL F/ 2089' TO 2534' 445' @ 48' P/HR WOB 15/20 MUD WT 9.2 PPG VIS 31
19:00 - 20:00		1.00	RIG	2	CIR. & WIRELINE SURVEY
20:00 - 05:30		9.50	DRL	1	DRILL FROM 2,534 TO 2,724 (ROP 34.5' HR) WOB 20-24, ROT 75, MW 9.2, VIS 29, BG GAS 800 UNITS OFF BUSTER
05:30 - 06:00		0.50	CIRC	1	SERVICE RIG, TOP DRIVE, SWIVEL
9/11/2008	06:00 - 11:30	5.50	DRL	1	DRILL FROM 2,724 TO 2,925 (ROP 33.5' HR) WORK SAME PERRAMETERS,,
	11:30 - 12:00	0.50	RIG	1	
	12:00 - 18:00	6.00	DRL	1	

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### Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/11/2008	12:00 - 18:00	6.00	DRL	1	HAD TAR COMING OVER SHAKER 2825'
	18:00 - 06:00	12.00	DRL	1	DRILL FROM 2,925 TO 3,297 (ROP 31' HR) WORK SAME PERAMETERS--DRILLING THRU BIRDS NEST @ REPORT TIME
9/12/2008	06:00 - 08:30	2.50	DRL	1	DRILL FROM 3,297 TO 3,392 (ROP 38' HR) WOB 20-24, RPM 75, MW 9.0, VIS 29, BG GAS 1600 UNITS
	08:30 - 09:30	1.00	SUR	1	SURVEY @ 3323 1.3 DEG AZ 178.9
	09:30 - 12:30	3.00	DRL	1	DRILL FROM 3,392 TO 3,483 (ROP 30.3) WORK SAME PERAMETERS, HAD ALOT OF SLIP STICK AND SLOWED TO 15' HR FOR 45 MIN
	12:30 - 14:30	2.00	TRP	10	TRIP OUT FOR BIT CHANGE
	14:30 - 15:30	1.00	TRP	1	LAY DOWN HOLE OPENER, MOTOR, BIT AND PICK UP THE SAME
	15:30 - 17:00	1.50	TRP	10	TRIP IN HOLE FILL @ BHA
	17:00 - 17:30	0.50	RIG	1	SERVICE RIG BLOCK, SWIVEL, DRAW-TOOL
	17:30 - 04:30	11.00	DRL	1	DRILL FROM 3,483 TO 3,854 (ROP 33.7' HR) WOB 17-24, RPM 75-80, MW 9.0+, VIS 32, BG GAS DRILLED SOME REAL AGRESSIVE SAND @ 3650 AND HAVE BEEN IN AND OUT OF SHARP SAND ALL NIGHT
9/13/2008	04:30 - 05:00	0.50	SUR	1	DROP SURVEY AND CHECK FLOW-WELL FLOWING 1/4" STREAM
	05:00 - 06:00	1.00	DRL	1	DRILL FROM 3,854 TO 3862 (ROP 8' HR) WORK DIFFERENT PERAMETERS BRING MW TO 9.4 IN ACTIVE
	06:00 - 08:30	2.50	TRP	10	TRIP OUT OF HOLE NO HOLE PROBLEMS
	08:30 - 09:30	1.00	TRP	1	LAY DOWN MOTOR, HOLE OPENER, X-OVER, PICK UP NEW 8 1/2" MOTOR AND BIT
	09:30 - 12:00	2.50	TRP	10	TRIP IN HOLE FILL @ BHA AND 3743
	12:00 - 13:30	1.50	REAM	1	WASH AND REAM FROM 3,743 TO 3,862-- TOP OF 8 3/4" PILOT STARTED @ 3,823'
	13:30 - 17:30	4.00	DRL	1	DRILL FROM 3,862 TO 3,971(ROP 27.3' HR) WOB 12-14, DHRPM 127, MW 9.4, VIS 29, BG GAS 414
	17:30 - 18:00	0.50	RIG	1	SERVICE RIG TOP DRIVE, BLOCKS AND SWIVEL
	18:00 - 06:00	12.00	DRL	1	DRILL FROM 3,971 TO 4,308 (ROP 28' HR) WOB 12-15, DHRPM 125, MW 9.3, VIS 30, BG GAS 120-- NO LOSSES
	9/14/2008	06:00 - 13:30	7.50	DRL	1
9/14/2008	13:30 - 14:00	0.50	RIG	1	SERVICE TOP DRIVE, BLOCKS, SWIVEL
	14:00 - 20:00	6.00	DRL	1	DRILL FROM 4,537 TO 4,728 (ROP 31.8' HR) WORK SAME PERAMETERS, MW 9.3, VIS 31, BG GAS 25
	20:00 - 21:00	1.00	SUR	1	CIRCULATE AND SURVEY @ 4655 .9 DEG, 149.0 AZ
9/15/2008	21:00 - 06:00	9.00	DRL	1	DRILL FROM 4,728 TO 4,963 (ROP 26.1' HR) WOB 13-20, DHRPM 120-145, MW 9.3, VIS 32, HAD ALOT OF SLIP STICK @ 4805-4823 & 4871-4905
	06:00 - 12:30	6.50	DRL	1	DRILL FROM 4,963 TO 5,110 (ROP 22.6' HR)WOB 13-20, DHRPM 125-135, MW 9.3, VIS 32, BG GAS 120, ROP SLOWED TO 12' HR FOR 1 1/2 HR.S
	12:30 - 13:00	0.50	RIG	1	RIG SERVICE, GREASE CROWN, BLOCKS, SWIVEL, DRAWWORKS
	13:00 - 14:30	1.50	DRL	1	DRILL FROM 5,110 TO 5,122 (ROP 8' HR) WORK ALL DIFFERANT PERAMETERS COULDN'T GET TO DRILL
	14:30 - 15:00	0.50	SUR	1	CHECKED FLOW--NO FLOW AND DROP SURVEY @ 5,070
	15:00 - 16:30	1.50	TRP	10	TRIP OUT OF HOLE
	16:30 - 17:00	0.50	TRP	1	LAY DOWN MOTOR AND BIT AND PICK UP SAME
	17:00 - 19:00	2.00	TRP	10	TRIP IN HOLE FILL @ BHA AND 5,011
	19:00 - 19:30	0.50	REAM	1	WASH FROM 5,011 TO 5,122 (NO HOLE FILL)
	19:30 - 06:00	10.50	DRL	1	DRILL FROM 5,122 TO 5310 (ROP 17.9' HR) WOB 12-18, DHRPM 135-155, MW 9.3, VIS 32, HAVE HAD ALOT OF SLIP STICK WITH NEW BIT AND MOTOR--HAVE TRIED DIFFERENT PERAMETERS TO GET SLIP STICK OUT-NO LUCK
9/16/2008	06:00 - 11:00	5.00	DRL	1	DRILL FROM 5,310 TO 5,450 (ROP 28' HR) WOB 12-16, DHRPM 125-135, MW 9.3, VIS 32, HAD ALOT OF SLIP STICK

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### Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations	
9/16/2008	11:00 - 12:00	1.00	CIRC	7	CIRCULATE UP FORMATION SAMPLE, FIRM SHALE- GEO-DON WEAVER	
	12:00 - 13:00	1.00	TRP	14	SHORT TRIP FOR 9 5/8 CASING RUN, NO HOLE FILL	
	13:00 - 14:00	1.00	CIRC	1	CIRCULATE BOTTOMS UP TO RUN CASING-SHAKER WERE CLEAN,	
	14:00 - 14:30	0.50	SUR	1	FLOW CHECK AND DROP SURVEY @ 5378 .8 DEG, 182.5 AZ	
	14:30 - 16:30	2.00	TRP	2	TRIP OUT OF HOLE TO RUN CASING (SLM 5450.57)	
	16:30 - 17:30	1.00	TRP	1	LAY DOWN 8" COLLARS AND MOTOR	
	17:30 - 18:00	0.50	OTH		PULL WEAR BUSHING	
	18:00 - 19:30	1.50	CSG	1	HELD SAFETY MEETING AND RIG UP CASING CREW	
	19:30 - 00:30	5.00	CSG	2	RUN 9 5/8 123 JOINTS, 47#, HCP110, CASING AS FOLLOWS SHOE @ 5439, FLOAT COLLAR @ 5354, RAN 25 CENTRALIZERS EVERY 120'+/- LANDED HANGER	
		00:30 - 01:30	1.00	CSG	1	R/D CASING CREW WHILE CIRCULATING
	01:30 - 02:30	1.00	CIRC	1	CIRCULATE HOLE THRU FLUTED HANGER	
	02:30 - 05:30	3.00	OTH		PACK OFF WELL HEAD AND SET CEMENT ISOLATION TOOL TO CEMENT THRU "A" SECTION	
9/17/2008	05:30 - 06:00	0.50	CIRC	1	CIRCULATE CASING THRU "A" SECTION TO CEMENT	
	06:00 - 09:00	3.00	CIRC	1	CIRCULATE CASING THRU A SECTION FOR CEMENT JOB,(FOAMING PUMPS NOT WORKING ON FOAMING TRAILER, FOUND @ 07:15	
	09:00 - 14:30	5.50	CMT	2	HELD SAFETY MEETING & RIG UP AND CEMENT 9 5/8 CASING PUMPED 50 BBL.S OF SPACER TRAIN, 30 BBL.S OF SCAVENGER CEMENT 7 PPG, 165 BBL.S FIRST LEAD 8.5 PPG, 210 BBL.S OF 2ND LEAD 11 PPG, 62 BBL.S OF TAIL CEMENT 14.3 PPG, DIPLACED WITH 392 BBL.S OF 9.3 MUD, LOST RETURNS 200 BBL.S INTO DIS PLACEMENT, PLUG BUMPED AND FLOATS HELD, PUMPED 55 BBL.S OF CAP 14.6 PPG	
		14:30 - 15:30	1.00	CMT	1	RIG DOWN CEMENTERS
		15:30 - 16:00	0.50	OTH		PULL CEMENT ISOLATION TOOL
		16:00 - 20:30	4.50	BOP	2	RIG UP TESTERS AND TEST BOPE TO 10,000 PSI
		20:30 - 21:00	0.50	TRP	1	PICK UP MOTOR AND MONEL
		21:00 - 23:30	2.50	TRP	2	TRIP IN HOLE FILL @ BHA AND @ 5,329
		23:30 - 00:30	1.00	DRL	4	DRILL FLOAT COLLAR AND SHOE
		00:30 - 01:30	1.00	DRL	1	DRILL FROM 5450 TO 5460 10' OF NEW HOLE FOR FIT TEST
	01:30 - 02:00	0.50	EQT	2	PERFORM FIT TEST MW 9.3PPG + 1205 PSI = 13.54 EQUIV. MW	
	02:00 - 06:00	4.00	DRL	1	DRILL FROM 5,460 TO 5,521 (ROP 15.3' HR) WOB 5-20, DHRPM 140-160,MW 9.3 VIS 32, BG GAS	
9/18/2008	06:00 - 10:30	4.50	DRL	1	DRILL 8 1/2" HOLE FROM 5529' TO 5614' (18.9' HR)	
	10:30 - 11:00	0.50	RIG	1	RIG SERVICE	
	11:00 - 21:30	10.50	DRL	1	DRILL FROM 5614' TO 5741' (ROP 12' HR)	
	21:30 - 22:00	0.50	SUR	1	DROP SURVEY	
	22:00 - 00:30	2.50	TRP	10	PUMP TRIP SLUG TRIP OUT OF HOLE	
	00:30 - 01:00	0.50	TRP	1	CHANGE OUT BIT	
	01:00 - 03:30	2.50	TRP	10	TRIP IN HOLE WITH NEW BIT- FILL @ BHA AND 5,615	
	03:30 - 04:00	0.50	REAM	1	WASH FROM 5,615 TO 5,741 (NO FILL)	
	04:00 - 06:00	2.00	DRL	1	DRILL FROM 5,741 TO 5,800 (ROP 29.5' HR) WOB 5-8, DHRPM 160-175, MW 9.3, VIS 36, BG GAS 31,	
9/19/2008	06:00 - 15:30	9.50	DRL	1	DRILL FROM 5,800 TO 5,908 (ROP 11.4' HR) WOB 5-15, DHRPM 120-160, BG GAS 30 UNITS, WORK DIFFERNT PERAMETERS TO GET TO DRILL- NO LUCK-DROPPED TO 5' HR FOR ONE HR	
		15:30 - 16:00	0.50	RIG	1	SERVICE RIG- TOP DRIVE, BLOCKS, SWIVEL
		16:00 - 19:00	3.00	TRP	10	TRIP OUT OF HOLE TO CHANGE BIT AND CBL LOGS
		19:00 - 19:30	0.50	LOG	2	HELD SAFETY MEETING AND RIG UP CUTTERS WIRE LINE
		19:30 - 22:00	2.50	LOG	2	LOG CASING TOP OF CEMENT @ 1910
		22:00 - 22:30	0.50	LOG	2	RIG DOWN LOGERS
		22:30 - 23:00	0.50	TRP	1	PICK UP BIT SUB, TORQUE BUSTER, BIT

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## Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/19/2008	23:00 - 01:30	2.50	TRP	10	TRIP IN HOLE FILL @ BHA AND 5,776
	01:30 - 02:00	0.50	REAM	1	WASH FROM 5,776 TO 5,908-HOLE IS GOOD SHAPE 2' FILL
	02:00 - 06:00	4.00	DRL	1	DRILL FROM 5,908 TO 5,988 (ROP 20' HR) WOB 7.5, DHRPM 75, MW 9.4, VIS 45, BG GAS 65
9/20/2008	06:00 - 10:00	4.00	DRL	1	DRILL FROM 5,988 TO 6,063 (ROP 18.8' HR) WOB 5-7, DHRPM 65, MW 9.4, VIS 32, BG GAS 31, HOLE SEEPING 4 BBL.S HR
	10:00 - 11:00	1.00	RIG	1	SERVICE RIG TOP DRIVE, BLOCKS, SWIVEL, DRAW TOOL, CROWN
	11:00 - 18:00	7.00	DRL	1	DRILL FROM 6,063 TO 6,240 (ROP 25.3' HR) WOB 5-8, DHRPM 85, MW 9.5, VIS 37, BG GAS 32, HOLE SEEPING 4 BBL.S HR
	18:00 - 02:30	8.50	DRL	1	DRILL FROM 6,240 TO 6,445 (ROP 24.1' HR) HOLE TOOK A 205 BBL DRINK @ 6239 LOST ALL RETURNS AND REGAIN AFTER PUMPING 10% LCM SWEEP 200 BBL.S HOLE IS SEEPING 15 BBL.S HR
9/21/2008	02:30 - 03:00	0.50	SUR	1	SURVEY @ 6403 1.5 DEG 148.9 AZ
	03:00 - 06:00	3.00	DRL	1	DRILL FROM 6,445 TO 6,518 (ROP 24.3' HR) WOB 7-9, DHRPM 85, MW 9.5, VIS 39, BG GAS 15, HOLE SEEPING 8 BBL.S HR
	06:00 - 11:30	5.50	DRL	1	DRILL FROM 6,518 TO 6,635 (ROP 21.3' HR) WOB 7-10 DHRPM 75, MW 9.5, VIS 38, BG GAS 16 HOLE SEEPING 6 BBL.S HR
	11:30 - 12:30	1.00	RIG	1	SERVICE RIG BLOCKS, SWIVEL, DRAWWORKS, TOP DRIVE
9/22/2008	12:30 - 18:00	5.50	DRL	1	DRILL FROM 6,635 TO 6,745 (ROP 20.0' HR) WOB 7-13 DHRPM 75-90, MW 9.5, VIS 40, BG GAS 38 HOLE SEEPING 4 BBL.S HR PUMPING 10 BBL. 10% LCM SWEEPS HRLY
	18:00 - 06:00	12.00	DRL	1	DRILL FROM 6,745 TO 7,000 (ROP 21.3' HR) WORKING THE SAME PERAMETERS
	06:00 - 12:00	6.00	DRL	1	DRILL FROM 7,000 TO 7,110 (ROP 18.3' HR) WOB 13-15, DHRPM 90, MW 9.5, VIS 39, HOLE STARTED SEEPING 14 BBL.S HR @ 7,090
	12:00 - 12:30	0.50	RIG	1	SERVICE RIG
9/23/2008	12:30 - 14:00	1.50	DRL	1	DRILL FROM 7,110 TO 7,135 (ROP 16.7' HR) WOB 15, DHRPM 90, MW 9.5, VIS 38 LOST DRILL PIPE SCREEN ON CONNECTION- SCREEN WENT DOWN DRILL PIPE
	14:00 - 16:30	2.50	TRP	10	TRIP OUT FOR BIT, 16 BBL.S OVER CALC. FILL
	16:30 - 17:30	1.00	TRP	1	LAY DOWN TORQUE BUSTER, BIT SUB, 2-DC'S, PICK UP NEW MOTOR AND BIT
	17:30 - 20:30	3.00	TRP	10	TRIP IN HOLE RABBETING PIPE LOOKING FOR DRILL PIPE SCREEN- FOUND IN SECOND HWDP FROM TOP- FILL @ BHA AND SHOE
	20:30 - 21:30	1.00	RIG	6	CUT AND SLIP 10 WRAPS OF DRILLING LINE
	21:30 - 22:30	1.00	TRP	10	TRIP IN OPEN HOLE
	22:30 - 23:00	0.50	REAM	1	WASH FROM 6952 TO 7135 (NO HOLE FILL)
9/23/2008	23:00 - 06:00	7.00	DRL	1	DRILL FROM 7,135 TO 7,317 (ROP 26' HR) WOB 7-8, DHRPM 145, MW 9.6, VIS 41, BGGAS 44
	06:00 - 11:00	5.00	DRL	1	DRILL FROM 7,317 TO 7,430 (ROP 22.6' HR) WOB 7-9, DHRPM 145, MW 9.5, VIS 39, BG GAS 25
	11:00 - 12:00	1.00	SUR	1	CIRCULATE AND SURVEY @ 7,370 1.6 DEG 159.7 AZ
	12:00 - 16:00	4.00	DRL	1	DRILL FROM 7,430 TO 7,525 (ROP 23.8' HR) WORK SAME PERRAMETERS
	16:00 - 16:30	0.50	RIG	1	SERVICE RIG AND TOP DRIVE
9/24/2008	16:30 - 06:00	13.50	DRL	1	DRILL FROM 7,525 TO 7,865 (ROP 25.2' HR) WOB 8-12, DHRPM 145, MW 9.5, VIS 38, BGGAS 27 ERATIC DRILLING @ 7538 BIT BOUNCE AND TORQUE SMOOTH 7,569
	06:00 - 10:30	4.50	DRL	1	DRILL FROM 7,865 TO 8,003 (ROP 30.7' HR) WOB 14, DHRPM 145, MW 9.5, VIS 38, BG GAS 31
	10:30 - 11:30	1.00	RIG	1	SERVICE RIG BLOCKS, DRAWWORKS, SWIVEL, TOP DRIVE
9/24/2008	11:30 - 18:00	6.50	DRL	1	DRILL FROM 8,003 TO 8,190 (ROP 26.7' HR) WOB 14, DHRPM 145, MW 9.5, 39, BG GAS 23, NO LOSSES
	18:00 - 06:00	12.00	DRL	1	DRILL FROM 8,190 TO 8,400 (ROP 17.5' HR) WOB 14-18, DHRPM 145, MW 9.5,

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### Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20-8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/24/2008	18:00 - 06:00	12.00	DRL	1	NO LOSSES
9/25/2008	06:00 - 09:30	3.50	DRL	1	DRILL F/ 8400' TO 8479' ( 79' @ 23' P/HR ) WOB 18/22 MUD WT 9.5 PPG VIS 36 W/ NO LOSSES
	09:30 - 10:30	1.00	CIRC	1	CIR BOTTOMS UP & WIRE LINE SURVEY 1* DEG. 152.3 AZI
	10:30 - 15:00	4.50	DRL	1	DRILL F/ 8479' TO 8573' ( 94' @ 21; P/HR ) WOB 18/22 MUV WT 9.6 PPG VIS 39 W/ NO LOSSES
	15:00 - 15:30	0.50	RIG	1	RIG SERVICE
	15:30 - 18:00	2.50	DRL	1	DRILL F/ 8573' TO 8628' ( 55' @ 22' P/HR ) WOB 18/22 MUD WT 9.6 PPG VIS 39 W/ NO LOSSES
	18:00 - 01:30	7.50	DRL	1	DRILL F/ 8628' TO 8763' ( 135' @ 19' P/HR ) WOB 18/22 MUD WT 9.6 PPG VIS 38
	01:30 - 02:00	0.50	CIRC	1	CIR & CHANGE OUT LEAKING ROTATING RUBBER
	02:00 - 06:00	4.00	DRL	1	DRILL F/ 8763' TO 8859' ( 96' @ 24' P/HR ) WOB 18/22 MUD WT 9.6 PPG VIS 40
9/26/2008	06:00 - 10:00	4.00	DRL	1	DRILL F/ 8859' TO 8954' ( 95' @ 24' P/HR ) WOB 18/22 MUD WT 9.6 PPG VIS 41 W/ NO LOSSES
	10:00 - 10:30	0.50	RIG	1	RIG SERVICE
	10:30 - 14:30	4.00	DRL	1	DRILL F/ 8954' TO 9046' ( 92' @ 23' P/HR ) WOB 20/22 MUD WT 9.6 PPG VIS 40
	14:30 - 15:30	1.00	CIRC	1	CIR. BOTTOMS UP & FLOW CHECK OK DROP SURVEY
	15:30 - 18:00	2.50	TRP	2	TRIP OUT OF HOLE
	18:00 - 22:00	4.00	ISP	1	INSPECT BHA & CHANGE OUT MUD MOTOR & BIT
	22:00 - 04:30	6.50	TRP	2	TRIP IN HOLE TO 8854'
	04:30 - 05:00	0.50	REAM	1	SAFETY WASH & REAM F/ 8854' TO BOTTOM @ 9046 W/ NO PROBLEMS OR FILL
	05:00 - 06:00	1.00	DRL	1	DRILL F/ 9046' TO 9066' ( 20' @ 20 P/HR ) WOB 15/18 MUD WT 9.6 PPG VIS 41
9/27/2008	06:00 - 11:00	5.00	DRL	1	DRILL F/ 9066' TO 9157' ( 91' @ 18.2 P/HR ) WOB 18/25 MUD WT 9.8 PPG VIS 43
	11:00 - 11:30	0.50	CIRC	1	FLOW CHECK - OK & PUMP PILL
	11:30 - 15:00	3.50	TRP	2	TOOH CHANGE MUD MOTOR & BIT
	15:00 - 19:30	4.50	TRP	2	TRIP IN HOLE
	19:30 - 20:00	0.50	REAM	1	SAFETY WASH & REAM F/ 8967' TO BOTTOM @ 9157' W/ NO FILL
	20:00 - 06:00	10.00	DRL	1	DRILL F/ 9157' TO 9415' ( 258' @ 26' P/HR ) WOB 15/20 MUD WT 9.9 VIS 42 W/ NO LOSSES
9/28/2008	06:00 - 11:30	5.50	DRL	1	DRILL F/ 9415' TO 9528' ( 113' @ 21' P/HR ) WOB 18/22 MUD WT 9.9 PPG VIS 41
	11:30 - 12:00	0.50	RIG	1	RIG SERVICE
	12:00 - 06:00	18.00	DRL	1	DRILL F/ 9528' TO 9967' ( 439' @ 25' P/HR ) WOB 18/22 MUD WT 10 PPG VIS 42
9/29/2008	06:00 - 09:00	3.00	DRL	1	DRILL F/ 9967' TO 10057' ( 90' @ 30' P/HR ) WOB 18/22 MUD WT 10.2 PPG VIS 41
	09:00 - 11:00	2.00	CIRC	2	LOST PARTIAL RETURNS PUMP 50 BBLS 20% LCM PILL RE-GAIN RETURNS LOST TOTAL OF 240 BBLS
	11:00 - 12:30	1.50	DRL	1	DRILL F/ 10057' TO 10102' ( 45' @ 30' P/HR ) WOB 18/22 MUD WT 10.2 PPG VIS 43
	12:30 - 13:00	0.50	RIG	1	RIG SERVICE
	13:00 - 21:00	8.00	DRL	1	DRILL F/ 10102' TO 10311' ( 209' @ 26' P/HR ) WOB 18/22 MUD WT 10.6 PPG VIS 42 ( # 1 SCR DOWN UNABLE TO DRILL WITH ONE MUD PUMP ) ELECTRICAN SHOULD BE ON LOCATION AROUND 0800 HRS )
	21:00 - 01:00	4.00	RIG	2	CIR. & CONDITION MUD PUMP ECD PILL
	01:00 - 03:30	2.50	RIG	2	TRIP TO CASING SHOE
	03:30 - 06:00	2.50	RIG	2	WAIT ON ELECTRICAN
9/30/2008	06:00 - 15:30	9.50	RIG	2	REPAIR # 1 SCR FOUND DAMAGED WIRE GOING TO RE-TRACTING MOTOR CAUSING GROUND FAULT REPAIRED RIH ( STAGE CIR. OUT ECD PILL )
	15:30 - 16:00	0.50	RIG	1	RIG SERVICE
	16:00 - 06:00	14.00	DRL	1	DRILL F/ 10311' TO 10600' ( 289' @ 21' P/HR ) WOB 20/25 MUD WT 11 PPG VIS 42
10/1/2008	06:00 - 08:00	2.00	DRL	1	DRILL F/ 10600 TO 10614' ( 14' @ 7P/HR ) WOB 18/26 MUD WT 11 PPG VIS 42
	08:00 - 09:30	1.50	CIRC	1	CIR. BOTTOMS UP FLOW CHECK DROP SURVEY & PUMP ECD PILL
	09:30 - 13:00	3.50	TRP	2	TRIP OUT OF HOLE

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### Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations	
10/1/2008	13:00 - 13:30	0.50	TRP	1	CHANGE OUT MUD MOTOR & BIT	
	13:30 - 18:30	5.00	TRP	2	TRIP IN HOLE TO 8255'	
	18:30 - 19:30	1.00	REAM	1	TIGHT HOLE @ 10390' WASH & REAM THROUGH TIGHT SPOT & REAM TO BOTTOM @ 10614'	
	19:30 - 06:00	10.50	DRL	1	DRILL F/ 10614' TO 10930' ( 316' @ 30' P/HR ) WOB 18/24 MUD WT 11.1 PPG VIS 43	
10/2/2008	06:00 - 11:30	5.50	DRL	1	DRILL F/ 10930 TO 10982 ( 52' @ 9.6' P/HR ) WOB 20/25 MUD WT 11.3 VIS 42	
	11:30 - 12:30	1.00	CIRC	1	CIR. BOTTOMS UP & PUMP ECD PILL	
	12:30 - 18:00	5.50	TRP	2	TOOH	
	18:00 - 19:30	1.50	TRP	1	LAY DOWN MUD MOTOR & PICK UP TORQUE BUSTER & NEW BIT	
	19:30 - 22:30	3.00	TRP	2	TIH TO SHOE	
	22:30 - 00:00	1.50	RIG	6	CUT & SLIP DRILL LINE	
	00:00 - 03:00	3.00	RIG	2	REPAIR LEAK ON DRAWWORKS ( REPLACE COOLANT HOSE )	
	03:00 - 05:00	2.00	TRP	2	TRIP IN HOLE TO 10120	
10/3/2008	05:00 - 06:00	1.00	CIRC	1	CIR OUT ECD PILL	
	06:00 - 06:30	0.50	DRL	1	TRIP IN HOLE TO 10712'	
	06:30 - 07:30	1.00	REAM	1	WASH & REAM ( TIGHT HOLE @ 10745 ) REAM THROUGH TIGHT SPOT THREE TIMES & CONTINUE TO REAM TO BOTTOMS W/ NO MORE HOLE PROBLEMS	
	07:30 - 03:30	20.00	DRL	1	DRILL F/ 10982' TO 11295' ( 313' @ 16' P/HR )	
	03:30 - 04:30	1.00	RIG	1	RIG SERVICE	
	04:30 - 05:30	1.00	CIRC	1	CIR. & PUMP ECD PILL & DROP SURVEY	
	05:30 - 06:00	0.50	TRP	2	TRIP OUT OF HOLE	
	06:00 - 09:30	3.50	TRP	2	TRIP OUT OF HOLE	
10/4/2008	09:30 - 10:30	1.00	TRP	1	LAY DOWN TORQUE BUSTER & BIT PICK UP NEW BIT W/ MUD MOTOR	
	10:30 - 15:30	5.00	TRP	2	TRIP IN HOLE TO 10645	
	15:30 - 16:30	1.00	CIRC	1	CIR OUT ECD PILL @ 10645	
	16:30 - 17:00	0.50	TRP	2	TRIP IN HOLE TO 11085	
	17:00 - 17:30	0.50	REAM	1	WASH & REAM F/ 11085' TO BOTTOM @ 11295 W/ NO HOLE PROBLEMS	
	17:30 - 06:00	12.50	DRL	1	DRILL F/ 11295 TO 11615' ( 320' @ 26' P/HR ) WOB 18/22 MUD WT 11.9 PPG VIS 45 W/ 22 BBLs P/HR LOSSES	
	06:00 - 08:00	2.00	DRL	1	DRILL F/ 11615' TO 11631	
	08:00 - 09:00	1.00	DRL	1	RIG SERVICE	
10/5/2008	09:00 - 20:30	11.50	DRL	1	DRILL 11631' TO 11812' ( 181' @ 15.8' P/HR ) WOB 15/25 MUD WT 12.3 PPG VIS 45 LOST RETURNS @ 11812'	
	20:30 - 23:00	2.50	CIRC	2	CIR. & PUMP LCM PILLS SPOT 30% LCM PILL	
	23:00 - 00:30	1.50	TRP	2	PULL OUT OF HOLE ABOVE LCM PILL	
	00:30 - 05:00	4.50	CIRC	6	BUILD MUD VOLUME	
	05:00 - 05:30	0.50	TRP	2	TRIP IN HOLE TO BOTTOM	
	05:30 - 06:00	0.50	CIRC	2	CIR BOTTOMS UP & CHECK FOR LOSSES	
	06:00 - 07:00	1.00	CIRC	1	CIR. BOTTOMS UP & CHECK FOR LOSSES ( WELL STATIC )	
	07:00 - 10:00	3.00	DRL	1	DRILL F/ 11812' TO 11837' ( 25' @ 8.3' P/HR ) WOB 25/28 MUD WT 12.1VIS 45	
	10:00 - 12:00	2.00	CIRC	1	CIR & MIX & PUMP ECD PILL DROP SURVEY	
	12:00 - 17:00	5.00	TRP	2	TRIP OUT OF HOLE	
10/6/2008	17:00 - 18:00	1.00	RIG	1	RIG SERVICE & CHANGE OUT SAVER SUB	
	18:00 - 19:00	1.00	TRP	1	BREAK OUT BIT & C/O BIT & MUD MOTOR	
	19:00 - 23:30	4.50	TRP	2	TRIP IN HOLE TO 10296'	
	23:30 - 00:30	1.00	CIRC	1	ATTEMPT TO CIR OUT ECD PILL HALF WAY LOST RETURNS ( TOP OF ECD PILL @ 5560' )	
	00:30 - 06:00	5.50	CIRC	2	MIX & PUMP 30% LCM PILLS & ATT. TO EST. RETURNS PUMP DRY SLUG RE-GAIN RETURNS CONTINUE TO PUMP OUT ECD PILL	
	10/7/2008	06:00 - 08:00	2.00	TRP	2	TRIP OUT OF HOLE TO CASING SHOE
		08:00 - 11:00	3.00	CIRC	2	CIR. & MIX PUMP LCM PILLS CIR. OUT ECD PILL

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## Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations
10/7/2008	11:00 - 11:30	0.50	TRP	2	TRIP IN HOLE 5 STANDS
	11:30 - 12:00	0.50	CIRC	1	CIR. BOTTOMS UP
	12:00 - 12:30	0.50	TRP	2	TRIP IN HOLE 5 STANDS
	12:30 - 13:30	1.00	CIRC	2	CIR. BOTTOMS UP W/ NO LOSSES
	13:30 - 14:00	0.50	TRP	2	TRIP IN HOLE 12 STANDS
	14:00 - 15:30	1.50	CIRC	2	CIR. BOTTOMS UP W/ NO LOSSES
	15:30 - 16:00	0.50	TRP	2	TRIP IN HOLE 12 STANDS
	16:00 - 18:00	2.00	CIRC	1	CIR. BOTTOMS UP W/ NO LOSSES
	18:00 - 18:30	0.50	TRP	2	TRIP IN HOLE 14 STANDS
	18:30 - 19:30	1.00	CIRC	1	CIR BOTTOMS UP
	19:30 - 21:00	1.50	TRP	2	TRIP IN HOLE
	21:00 - 22:00	1.00	CIRC	1	CIR BOTTOMS UP
	22:00 - 23:30	1.50	TRP	2	TRIP IN HOLE 2 STANDS ( TAG RESISTANCE @ 11412' )
	23:30 - 00:30	1.00	REAM	1	WASH & REAM F/ 11412 TO 11837
00:30 - 06:00	5.50	DRL	1	DRILL F/ 11837 TO 11930 ( 93' @ 16.9' P/HR ) WOB 15/22 MUD WT 12.1 VIS 44 W/ NO LOSSES	
10/8/2008	06:00 - 11:30	5.50	DRL	1	DRILL F/ 11930' TO 12002' ( 72' @ 14' P/HR ) WOB 20/25 MUD WT 12.1 PPG VIS 44 W/ NO LOSSES
	11:30 - 14:00	2.50	CIRC	1	CIR. HOLE CLEAN
	14:00 - 15:00	1.00	TRP	2	SHORT TRIP
	15:00 - 18:30	3.50	CIRC	1	CIR. & CONDITION MUD FOR LOGGING & DROP SURVEY & PUMP ECD PILL
	18:30 - 00:00	5.50	TRP	2	TRIP IN HOLE ( SLM ) NO CORECTION
	00:00 - 06:00	6.00	LOG	1	SAFETY MEETING & RUN OPEN HOLE LOGS ( TAG RESISTANCE @ 7345' PULL MAX. TO GET FREE POH & R/D SCH. )
10/9/2008	06:00 - 06:30	0.50	OTH		CHANGE OUT ROTATING HEAD FOR LOGGING
	06:30 - 09:30	3.00	TRP	15	TRIP IN HOLE TO CASING SHOE
	09:30 - 11:00	1.50	RIG	6	CUT AND SLIP DRILLING LINE
	11:00 - 12:00	1.00	CIRC	1	CIRCULATE BOTTOMS UP @ SHOE
	12:00 - 18:00	6.00	TRP	15	TRIP IN HOLE STAGING IN EVERY 20 STANDS CIRCULATING HIGH VIS SWEEPS
	18:00 - 19:30	1.50	REAM	1	WASH AND REAM FROM 11,482 TO 12002 HIT BRIDGES @ 11,482 TO 11,500 AND 11,710 TO 11,725
	19:30 - 22:00	2.50	CIRC	1	CIRCULATE BOTTOMS UP AND HIGH VIS SWEEP OUT OF HOLE
	22:00 - 02:30	4.50	TRP	2	TRIP OUT OF HOLE TO RUN LOGS--SLICK NO BOW SPRINGS AND CENTERLIZERS
02:30 - 06:00	3.50	LOG	1	RUN LOGS WITH NO BOW SPRINGS, CENTRILIZERS--SLICK TAGGED UP @ 7,350-- RAN INTO LEDGE 6 TIMES- COUDN'T GET PAST, HIT BRIDGES GOING IN @ 5,487 X 3, 5,532, 5,649, 5,719, 5,840, 6,893, 7,345 X 2, 7339 X 4 STARTED PULLING TIGHT COMING OUT OF HOLE	
10/10/2008	06:00 - 07:00	1.00	LOG	1	RIG DOWN LOGGERS
	07:00 - 09:30	2.50	TRP	15	TRIP IN HOLE TO SHOE
	09:30 - 10:30	1.00	CIRC	1	CIRCULATE BOTTOM S UP @ SHOE
	10:30 - 17:30	7.00	TRP	15	STAGE IN HOLE TO BOTTOM TAGGED @ 7,345, 7,428, 8,903, 9,375, 10,062, 10,785, 11,770
	17:30 - 20:00	2.50	CIRC	1	CIRCULATE HIGH VIS SWEEP AROUND, MUD PROPERTIES IN ORDER MW 12.1+ VIS 48, BG GAS 1746 AND RIG UP L/D TRUCK,
	20:00 - 23:00	3.00	TRP	2	TRIP OUT OF HOLE TO LAY DOWN DRILL PIPE
	23:00 - 23:30	0.50	TRP	3	HELD SAFETY MEETING AND RIG UP L/D POLE
	23:30 - 02:30	3.00	TRP	3	LAY DOWN 5" DRILL PIPE
	02:30 - 04:00	1.50	TRP	2	TRIP PIPE OUT OF DERRICK IN TO HOLE
	04:00 - 06:00	2.00	TRP	3	LAY DOWN 5" DRILL PIPE
10/11/2008	06:00 - 07:00	1.00	TRP	3	LAY DOWN 5" DRILL PIPE
	07:00 - 07:30	0.50	TRP	2	TRIP IN HOLE WITH LAST 1,000' PIPE IN DERRICK

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### Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations	
10/11/2008	07:30 - 10:00	2.50	TRP	1	LAY DOWN 5" DRILL PIPE AND BHA	
	10:00 - 10:30	0.50	OTH		PULL WEAR BUSHING	
	10:30 - 12:00	1.50	CSG	1	RIG UP CASING CREW	
	12:00 - 12:30	0.50	CSG	2	MAKE UP FLOAT SHOE AND COLLAR PUMP THRU	
	12:30 - 13:00	0.50	OTH		FIX RATS NEST IN DRILLING LINE (HANG BLOCKS)	
	13:00 - 01:00		12.00	CSG	2	RUN 7" CASING BREAK CIRCULATION EVERY 25 JT'S AND CIR BOTTOMS UP @ SHOE (5458), 8220, 10462 (LOST RETURNS)
		01:00 - 06:00				5.00
10/12/2008	06:00 - 13:00	7.00	CIRC	1	CIRCULATE BUILD VOLUME AND WAIT ON HALLIBURTON.	
	13:00 - 15:00	2.00	DEQ	4	ATTEMPT TO SET PACK OFF. FLUTEED HANGER WOULD NOT DRAIN AND FLUID WOULD NO ALLOW PACK OFF ASSEMBLY TO SET. HYDRO LOCKED. CAMERON SAID IT IS A PROBLEM WITH ENGINEERING AND NEEDS TO BE CORRECTED. AND NEEDED TO BE PICKED UP TO LET FLUID OFF BACK SIDE WHERE PACK OFF GOES	
	15:00 - 16:00	1.00	RIG	1	SERVICE RIG, TOP DRIVE, BLOCKS, SWIVEL	
	16:00 - 17:00	1.00	OTH		RIG UP ELEVATORS AND PICK UP LADING JT. TO RELEASE WATTER OFF BACK SIDE, SUCKED OUT CASING AND SIDES WITH VACUMM SO IT WOULDN'T FILL BACK IN	
	17:00 - 20:00	3.00	DEQ	4	SET IN SEAL ASSEMBLY AND TEST TO 7,150 PSI, SET IN CEMENT ISOLATION TOOL	
	20:00 - 22:00	2.00	CMT	1	HELD SAFETY MEETING AND RIG UP HALLIBURTON ON "B" SECTION AND CEMENT HEAD ATTEMPT TO CIRCULATE (NO CIRCULATION)	
	22:00 - 02:00	4.00	CMT	2	PUMP 10 BBL.S OF 10% CACL WATER, 10 BBL. FRESH WATER, 25 BBL.S SUPER FLUSH, 10 BBL FRESH WATER, 10 BBL. 10% CACL WATER, 10 BBL.S FRESH WATER, 25 BBL.S SUPERFLUSH, 10 BBL.S FRESH WATER, PUMP 50 BBL.S 7 PPG SCAVENGER CEMENT, 1ST LEAD 110 BBL.S 8.5 PPG CEMENT, 2 ND LEAD 167 BBL.S 10 PPG CEMENT, TAIL 48 BBL.S 14.3 PPG CEMENT, DIS PLACED WITH 14.3+ OBM	
	02:00 - 04:00	2.00	CMT	1	WASH UP CEMENT PUMPS AND RIG DOWN CEMENTERS	
	04:00 - 05:00	1.00	OTH		CHANGE SAVE SUB AND MOUSE HOLE.	
	05:00 - 06:00	1.00	BOP	2	TEST BOP.	
10/13/2008	06:00 - 15:00	9.00	BOP	2	TEST BOPE (IBOP VALVE ON TOP DRIVE DIDN'T TEST UNIT HAD WRONG VALVE ON LOCATION) TO 10,000 PSI HIGH AND 250 PSI LOW UPPER/ LOWER PIPE RAMS, BLIND RAMS, CHOKE MANIFOLD, HCR VALVE, WING VALVES, 5000 PSI HIGH AND 250 LOW ANNULAR, 1500 PSI CASING TEST---CHANGED OUT BLADDER IN #1 MUD PUMP	
	15:00 - 16:00	1.00	RIG	1	SERVICE RIG TOP DRIVE, BLOCKS, SWIVEL	
	16:00 - 17:00	1.00	OTH		SET IN WEAR BUSHING	
	17:00 - 18:00	1.00	OTH		CHANGE TO HIGH PRESSURE ROT HEAD	
	18:00 - 01:30	7.50	TRP	1	RIG UP LAY DOWN TRUCK TO PICK UP 4" BHA AND DRILL PIPE TO 6112'.	
	01:30 - 02:30	1.00	OTH		LOAD PIPE RACKS AND MEASURE DRILL PIPE.	
	02:30 - 06:00	3.50	TRP	1	CONTINUE TO PICK UP DRILL PIPE FROM 6112' TO	
10/14/2008	06:00 - 08:00	2.00	TRP	1	PICK UP 4" DRILL PIPE	
	08:00 - 09:00	1.00	DRL	4	DRILL OUT PLUG/FLOAT TAGGED @ 11,869	
	09:00 - 10:30	1.50	OTH		CHANGE SWIVEL PACKING--	
	10:30 - 11:00	0.50	DRL	4	DRILL OUT SHOE TRACK WITH 14.0# OBM	
	11:00 - 15:30	4.50	DRL	1	DRILL FROM 12,002 TO 12,052 (ROP 11.1' HR) WOB 5-10, DHRPM 120, MW 14.0, BG GAS 150UNITS, WELL SEEPING 20 BBL.S HR, CUT MW BACK TO 13.5 PPG HOLE STILL SEEPING	
	15:30 - 17:00	1.50	CIRC	1	CIRCULATE BOTTOMS UP AND SPOT ECD AND LCM PILL ON BOTTOM	
	17:00 - 18:30	1.50	TRP	2	TRIP OUT OF HOLE TO RUN CEMENT BOND LOG,	

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### Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations	
10/14/2008	18:30 - 19:00	0.50	CIRC	1	CHECK FLOW, WELL FLOWING CIRCULATE BOTTOMS UP, WELL STATIC AFTER	
	19:00 - 23:30	4.50	TRP	2	TRIP OUT TO RUN CBL LOG.	
	23:30 - 00:00	0.50	LOG	4	INSTALL WIRE LINE LUBRACATOR.	
10/15/2008	00:00 - 06:00	6.00	LOG	4	PRE JOB SAFETY MEEETING: RIG UP AND RUN CBL LOG.	
	06:00 - 07:30	1.50	LOG	4	RIG DOWN SCHLUMBERGER CBL RUN.	
	07:30 - 11:00	3.50	TRP	2	TRIP IN HOLE OPEN ENDED TO SQUEEZE CEMENT	
	11:00 - 12:30	1.50	RIG	6	CUT AND SLIP DRILLING LINE	
	12:30 - 15:00	2.50	TRP	2	PICK UP SINGLES WITH TUGGER -BHA LEFT IN DERRICK FOR SQUEEZE JOB	
	15:00 - 16:00	1.00	RIG	1	SERVICE RIG-WORK ON COMPENSATORS-CHARGED	
	16:00 - 06:00	14.00	CIRC	1	CIRCULATE AND TAG BOTTOM WITH MW 13.6 PPG	
10/16/2008	06:00 - 08:30	2.50	CMT	4	SAFETY MEETING: SET CEMENT PLUG PUMP 13 BBL.S TUNED SPACER, 24 1/2 BBL.S OF SQUEEZE CEMENT, PUMP 6 1/2 BBL.S TUNED SPACER, DIS PLACE WITH OBM (TOTAL OF 111 BBL.S)TEST COMPRESSIVE STREATH 8 HR 1300 PSI, 12HR 1389 PSI, 24HR 1500PSI	
	08:30 - 09:00	0.50	TRP	2	PULL 15 STANDS OF DRILL PIPE	
	09:00 - 10:00	1.00	CIRC	1	CIRCULATE DRILL STRING, BOTTOMS UP	
	10:00 - 11:30	1.50	CMT	3	SQUEEZE CEMENT PRESSURE UP IN STEPS 150PSI, 250PSI, 350 PSI, 450PSI, 500PSI--HELD 524 PSI FOR ONE HR BLEED OFF PRESSURE, PRESSURED BACK UP ON SQUEEZE HELD GOOD	
	11:30 - 12:30	1.00	CMT	1	RIG DOWN CEMENT EQUIPMENT	
	12:30 - 16:30	4.00	TRP	2	PUMP TRIP SLUG TRIP OUT OF HOLE	
	16:30 - 17:00	0.50	OTH		PUMP DOWN BACK SIDE TO SEE IF WOULD PRESSURE UP, PUMP 17 BBL.S AND HAD NO PRESSURE (WHEN OPENED THE VALVES WELL WAS ON VACUMM)	
	17:00 - 18:00	1.00	RIG	1	SERVICE RIG, TOP DRIVE--CHANGE OUT DOUBLE BALL VALVE--LEAKING OBM WHEN TRIPPING	
	18:00 - 19:00	1.00	RIG	2	CHANGE OUT WASHED OUT DOUBLE BALL VALVE	
	19:00 - 20:00	1.00	TRP	2	TRIP IN HOLE WITH BHA--FOUND BROKEN EAR ON BALE LINK TILT (NEEDED WELDED)	
	20:00 - 20:30	0.50	RIG	2	WELD BALE LINK TILT	
	20:30 - 01:00	4.50	TRP	2	TRIP IN HOLE FILL PIPE EVERY 4,000'	
	01:00 - 02:30	1.50	DRL	4	DRILL LOST CIRCULATION CEMENT PLUG TO 11,952	
	02:30 - 06:00	3.50	CIRC	1	CIRCULATE SAMPLES OF CEMENT UP- GRANULATED-NON FIRM (PUDDY)-SANDY CEMENT @ 11,952	
	10/17/2008	06:00 - 07:00	1.00	CIRC	1	CIRCULATE AND WAIT ON ORDERS FROM DENVER TO DRILL OUT OF SHOE
		07:00 - 08:00	1.00	RIG	1	SERVICE RIG AND TOP DRIVE, BLOCK SWIVEL, CROWN
		08:00 - 09:00	1.00	DRL	5	DRILL OUT FROM 11,493 TO 12,052--CEMENT SOFT DIDN'T TAKE ANY WEIGHT TO DRILL
09:00 - 09:30		0.50	DRL	1	DRILL FROM 12,052 TO 12,060	
09:30 - 10:30		1.00	EQT	2	CIRCULATE AND TEST FORMATION MW13.6 + 260 PSI =EMW 14.0	
10:30 - 18:00		7.50	DRL	1	DRILL FROM 12,060 TO 12,220 (ROP 21.3' HR) WOB 12-13, DHRPM 160, BG GAS 130, PUMPING LCM SWEEPS EVERY HR FOR SEEPAGE	
18:00 - 03:30		9.50	DRL	1	DRILL FROM 12,220 TO 12,324 (ROP 10.9' HR) WOB 10-16, DHRPM 160, BG GAS 350 UNITS VENTED TO BUSTER,	
10/18/2008	03:30 - 04:00	0.50	SUR	1	DROP SURVEY AND CHECK FOR FLOW-NO FLOW	
	04:00 - 05:00	1.00	CIRC	1	CIRCULATE BOTTOMS UP AND SPOT ECD SLUG (25 BBL.S 14.5 PPG)	
	05:00 - 06:00	1.00	TRP	10	TRIP OUT FOR BIT	
	06:00 - 10:00	4.00	TRP	10	TRIP OUT OF HOLE FOR BIT SURVEY @ 12,259 4.6 DEG 161 AZ	
	10:00 - 11:00	1.00	TRP	1	LAY DOWN MOTOR AND BIT, PICK UP MOTOR, BIT 2-XOVERS, IBS--CLEAN RIG FLOOR FOR TRIP IN HOLE	
	11:00 - 17:00	6.00	TRP	10	TRIP IN HOLE FILL @ BHA AND EVERY 44 STANDS OF DRILL PIPE	
	17:00 - 17:30	0.50	REAM	1	WASH FROM 12,153 TO 12,321 (NO HOLE FILL)	

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### Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations
10/18/2008	17:30 - 21:30	4.00	DRL	1	DRILL FROM 12,321 TO 12,376 (ROP 13.75' HR)
	21:30 - 06:00	8.50	RIG	2	REPAIR RIG SCR #2 & #1 NOT WORKING AND TOP DRIVE HOUSE BREAKER WOULDN'T KICK IN
10/19/2008	06:00 - 06:00	24.00	RIG	2	CHANGE OUT 6 FUSES AND 6 PUCK'S IN SCR1 (4) AND SCR2 (2) WAS FIXED @ 9:00AM, CHANGED OUT BREAKERS IN SCR HOUSE FOR TOP DRIVE HOUSE-DIDN'T FIX PROBLEM-FOUND "B" MODULE IN TOP DRIVE SCR BURNT - SENDING MODULE OUT OF HOUSTON TO GRAND JUNCTION SHOULD BE IN GRAND JUNCTION @ 7:00 AM CIRCULATING @ SHOE
10/20/2008	06:00 - 12:30	6.50	RIG	2	CHANGED OUT MUDULE "B" IN TOP DRIVE SCR HOUSE ALL PARTS SHOWED UP ON LOCATION @ 9:20 A.M. HAD TO BUILD MODULE ON LOCATION AND PUT IN SCR
	12:30 - 13:00	0.50	RIG	2	TRIP IN TO START DRILLING
	13:00 - 18:00	5.00	DRL	1	DRILL FROM 12,376 TO 12,450 (ROP 14.8' HR) WOB 8-10, DHRPM 118, MW 13.6, VIS 45, BG GAS 300 UNITS
10/21/2008	18:00 - 06:00	12.00	DRL	1	DRILL FROM 12,450 TO 12,710 (ROP 21.6' HR) WOB 10-11, DHRPM 120, MW 13.7, VIS 44, BG GAS 300 UNITS HOLE SEEPING 2 BBL.S HR PUMPING 10 BBL 20% LCM SWEEPS HRLY
	06:00 - 10:30	4.50	DRL	1	DRILLING FROM 12,710 TO 12,820 (ROP 24.4' HR) WOB 11, DHRPM 120, MW 13.8, BG GAS 300 UNITS, NO FLARE
	10:30 - 11:00	0.50	RIG	1	SERVICE RIG, TOP DRIVE, BLOCKS, SWIVEL, CROWN
	11:00 - 18:00	7.00	DRL	1	DRILL FROM 12,820 TO 12,940 (ROP 17.1' HR) WOB 11, DHRPM 115, MW 13.9, VIS 43, BG GAS 5500 UNITS NO FLARE, FLOWING 1 1/2" STREAM ON CONNECTION
	18:00 - 06:00	12.00	DRL	1	DRILL FROM 12,940 TO 13,175 (ROP 19.6' HR) WOB 11-13, DHRPM 115, MW 14.2, VIS 45, BG GAS 1800 UNITS NO FLARE
10/22/2008	06:00 - 10:00	4.00	DRL	1	DRILL FROM 13,175 TO 13,297 (ROP
	10:00 - 10:30	0.50	RIG	1	RIG SERVICE, TOP DRIVE, BLOCKS, SWIVEL
	10:30 - 12:00	1.50	DRL	1	DRILL FROM 13,297 TO 13,311 (ROP
	12:00 - 06:00	18.00	RIG	2	TOP DRIVE SCR HOUSE MODULE "A" AND "B" BURNT UP, SCR BAY #2 BURNT TO PUCKS(SAME ONES AS ON 10/18/2008)--WAS RUNNING #1PUMP ON SCR #2-- TRIP TO SHOE AND CIRCULATE WITH #2 PUMP
10/23/2008	06:00 - 18:00	12.00	RIG	2	CHANGE OUT IGBT ON TOP DRIVE UNIT DRIVE A AND B. CHANGE OUT DC MODULE, PUCKS AND BUSE FUSES IN SCR BAY #1
	18:00 - 23:30	5.50	RIG	2	WAITING ON TESCO TOP DRIVE TECHNICIAN
	23:30 - 04:00	4.50	RIG	2	TESTED TOP DRIVE BURNED AND REPLACED IGBT AND CIRCUIT BOARD ON DRIVE A
10/24/2008	04:00 - 06:00	2.00	RIG	2	TEST RUN TOP DRIVE, SCR BAYS, MUD PUMPS
	06:00 - 12:30	6.50	RIG	2	CONT. TO TROUBLE SHOOT SCR PORBLEMS WITH UNIT ELECTRICANS ( FOUND # 1 MODULE BAD ) CAUSING TRACTION MOTORS TO RUN HOT )
	12:30 - 13:00	0.50	RIG	2	TRIP IN HOLE F/ CASING SHOE TO BOTTOM @ 13311 W/ NO HOLE PROBLEMS
	13:00 - 16:00	3.00	CIRC	1	CIR. & CONDITION HOLE
	16:00 - 19:00	3.00	CMT	2	HELD SAFETY MEETING W/ HAL & RIG CREW CARRY OUT CAP CEMENT JOB PUMP 4 BBLs WATER AHEAD & 210 BBLs CMT @ 13.6 PPG & FLUSH LINES W/ 3 BBLs WATER ( CIR. RATE @ 2 BBLs W/ 540 PSI CIR. PSI. ) THE LAST 22 BBLs CIR. PSI INCREASE TO 750 PSI )
	19:00 - 20:00	1.00	CIRC	1	DROP SURVEY & PUMP ECD PILL TOTAL 80 BBLs
	20:00 - 02:00	6.00	TRP	10	POOH FOR BIT HOLE IN GOOD CONDITION
	02:00 - 03:00	1.00	TRP	1	LAY DOWN BIT, MUD MOTOR, IBS SUB PICK UP NEW MUD MOTOR, BIT. SURVEY @ 13260 INC. 2.7"
	03:00 - 05:00	2.00	TRP	10	TIH W/BIT MM, WEIGHT PIPE, SURFACE TEST MM. PRESSURED UP TO 2000 BLED OFF SLOWLY
	05:00 - 06:00	1.00	TRP	13	POOH DUE TO FAILED SURFACE TEST ON MUD MOTOR

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## Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations
10/25/2008	06:00 - 08:30	2.50	TRP	12	LAY DOWN MUD MOTOR PLUGGED WITH LCM
	08:30 - 15:00	6.50	TRP	12	TRIP IN WITH .26 MUD MOTOR TO SHOE
	15:00 - 16:30	1.50	RIG	6	SLIP AND CUT DRILLING LINE
	16:30 - 17:00	0.50	TRP	2	TRIP IN 7 STDS TO 12615'
	17:00 - 18:30	1.50	CIRC	1	CIRCULATE HALF OF ECD PILL OUT
	18:30 - 06:00	11.50	RIG	2	RIG SCR #2 BLEW FUSES, TOP DRIVE SCR BANK #2 REPLACE IGBT WAIT ON TOP DRIVE TECH FROM HOUSTON, POSSIBBLE TECH FOR SCR UNIT NO ROTATION ON TOP DRIVE
10/26/2008	06:00 - 06:00	24.00	RIG	2	OMROM TECH AND TOPDRIVE TECH ON LOCATION, INSPECT SCR #2, MAIN BREAKER PANEL BAD ORDERED PARTS, SUPPOSE TO BE IN SUNDAY AM
10/27/2008	06:00 - 06:00	24.00	RIG	2	PARTS ARRIVED AT 0130, CHANGE OUT BRIDGE ON SCR 2, TOP DRIVE HAD 16 PINCONNECTOR WITH LOOSE PIN GOING TO BUS BOARD ON DRIVE A
10/28/2008	06:00 - 08:00	2.00	RIG	2	REPAIR #2 SCR LOAD TEST
	08:00 - 09:00	1.00	CIRC	1	TRIP IN CIRCULATE ECD PILL OUT
	09:00 - 15:30	6.50	DRL	1	DRILL F/13311' TO 13701' WOB 12, DHRPM 110, 230 GPM
	15:30 - 16:00	0.50	RIG	1	RIG SERVICE
10/29/2008	16:00 - 06:00	14.00	DRL	1	DRILL F/13701' TO 14176' WOB 12, DHRPM 110, 230 GPM
	06:00 - 14:00	8.00	DRL	1	DRILL F/14176' TO 14525' WOB 12/14, DHRPM 110, 230 GPM .26 MM
	14:00 - 14:30	0.50	RIG	1	RIG SERVICE
10/30/2008	14:30 - 06:00	15.50	DRL	1	DRILL F/14525' TO 15265' WOB 12/14, DHRPM 110, 210 GPM
	06:00 - 12:30	6.50	DRL	1	DRILL F/15265' TO 15578' WOB 14, DHRPM 110, GPM 230, MM .26
	12:30 - 13:30	1.00	RIG	1	RIG SERVICE, CHANGE OIL IN TOP DRIVE
10/31/2008	13:30 - 06:00	16.50	DRL	1	DRILL F/15578' TO 16260' WOB 15, DHRPM 90, GPM 210
	06:00 - 12:30	6.50	DRL	1	DRILL F/16260' TO 16532' WOB 15, DHRPM 90, 210 GPM
	12:30 - 13:30	1.00	RIG	1	RIG SERVICE
	13:30 - 19:00	5.50	DRL	1	DRILL F/16532' TO 16761' WOB 17, DHRPM 90, 210 GPM
	19:00 - 20:30	1.50	TRP	10	DROP SURVEY, PUMP DRY PIPE PILL PULL 10 STDS FLOW CHECK
11/1/2008	20:30 - 21:00	0.50	TRP	10	WELL FLOWING TRIP BACK TO BOTTOM
	21:00 - 00:00	3.00	CIRC	1	CIRCULATE GAS OUT, PUMP ECD PILL
	00:00 -		TRP	10	TRIP OUT BIT #18
	06:00 - 07:00	1.00	TRP	10	TRIP OUT BIT #18
	07:00 - 08:00	1.00	TRP	1	LAY DOWN MUD MOTOR AND BIT, PICK UP TORQUE BUSTER AND BIT
	08:00 - 12:00	4.00	TRP	10	TRIP INTO SHOE WITH BIT #19
	12:00 - 13:30	1.50	CIRC	1	CIRCULATE TOP OF ECD PILL OUT
	13:30 - 14:30	1.00	TRP	10	TRIP IN TO 13,320' TIGHT HOLE
11/2/2008	14:30 - 06:00	15.50	REAM	1	WASH AND REAM F/13,320' TO 15500'
	06:00 - 14:30	8.50	REAM	1	REAM F/15500' TO 16761'
	14:30 - 16:00	1.50	DRL	1	DRILL F/16761' TO 16769' WOB 15, ROT 60, GPM 230
	16:00 - 16:30	0.50	RIG	1	RIG SERVICE
11/3/2008	16:30 - 06:00	13.50	DRL	1	DRILL F/16769' TO 16868' WOB 15, ROT 50/65, GPM 210 LOST 40 BBLS IN FRACTURE 16867'
	06:00 - 07:00	1.00	CIRC	1	CIRCULATE, PUMP DRY PIPE PILL, CHECK FOR FLOW
	07:00 - 13:00	6.00	TRP	10	TRIP OUT BIT # 19
	13:00 - 13:30	0.50	TRP	1	LAY DOWN TORQUE BUSTER AND CHANGE OUT BIT
	13:30 - 18:30	5.00	TRP	10	TRIP TO SHOE
	18:30 - 19:30	1.00	RIG	6	SLIP AND CUT DRILLING LINE
	19:30 - 20:00	0.50	RIG	1	RIG SERVICE
	20:00 - 22:00	2.00	TRP	10	TRIP IN BIT #20
	22:00 - 23:00	1.00	REAM	1	WASH AND REAM LAST STD TO BOTTOM
	23:00 - 00:30	1.50	CIRC	1	CIRCULATE BOTTOMS UP CHANGE OUT ROTATING HEAD RUBBER
	00:30 - 06:00	5.50	DRL	1	DRILL F/16868' TO 16920' WOB 16, ROT 55, GPM 230
11/4/2008	06:00 - 21:00	15.00	DRL	1	DRILL F/ 16,920 T/ 17,016. 96 FT, 6.4 FPH DRILLED INTO FRACTURE @ 17,013, STALLED WHEN ATTEMPTING T/

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### Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations	
11/4/2008	06:00 - 21:00	15.00	DRL	1	RESTART. DRILLED T/ 17,016.	
	21:00 - 22:00	1.00	SUR	1	DROP SURVEY. ATTEMPT T/ PUMP SLUG.	
					STRING PRESSURED UP, NO CIRCULATION. CHECK SURFACE EQUIPMENT, DP SCREEN, ETC. N/G	
	22:00 - 02:00	4.00	FISH	4	WAIT ON WIRELINE TRUCK	
11/5/2008	02:00 - 06:00	4.00	FISH	4	SAFETY MEETING, R/U D.C.T. WIRELINE & RIH W/ SURVEY RETRIEVING TOOL	
	06:00 - 09:30	3.50	FISH	4	RIH W/ DCT WIRELINE. ATTEMPT TO JAR MULTI-SHOT SURVEY TOOL FREE. NO PROGRESS. POH.	
	09:30 - 16:30	7.00	FISH	4	MK UP 5 SHOT 1/4" PERF GUN. RIH. PERF GUN DID NOT FIRE. MK UP 9 SHOT 1/8" PERF GUN. RIH. PERFORATE 1ST DRILL COLLAR ABOVE MONEL.	
	16:30 - 17:00	0.50	FISH	4	R/D W/L TRUCK.	
	17:00 - 17:30	0.50	REAM	2	WASH 130 FT T/ BTM.	
	17:30 - 19:30	2.00	CIRC	1	CIRCULATE / CONDITION @ 4.8 BPM. 6,590 UNITS, 35 FT FLARE.	
	19:30 - 02:30	7.00	TRP	10	PUMP SLUG. TOH F/ NEW BIT.	
	02:30 - 06:00	3.50	TRP	1	L/D PERFORATED DC, WIRELINE TOOLS & REMOVE SURVEY TOOL F/ BIT SUB	
	11/6/2008	06:00 - 14:00	8.00	TRP	10	TRIP IN HOLE FILL EVERY 5 ROWS, BREAK CIRCULATION FOR 5-10 MINUTES
		14:00 - 15:00	1.00	CIRC	1	CIRCULATE OUT TRIP SLUG
15:00 - 16:00		1.00	TRP	10	TRIP IN HOLE TO 16,855 TO	
16:00 - 17:00		1.00	OTH		INSTALL ROTATING HEAD AND CHANGE OUT ROTATING HEAD	
17:00 - 18:00		1.00	REAM	1	WASH FROM 16,855 TO 17,016 (NO HOLE FILL)	
18:00 - 01:30		7.50	DRL	1	DRILL 17,016 TO 17,070 (ROP 7.2' HR) WOB 14, DHRPM 52, MW 14.9, VIS 49, BG GAS 380	
01:30 - 03:00		1.50	CIRC	5	CIRCULATE UP SAMPLE	
03:00 - 04:00		1.00	TRP	14	SHORT TRIP 10 STANDS	
04:00 - 06:00		2.00	CIRC	1	CIRCULATE BOTTOMS UP AND SPOT ECD SLUG	
11/7/2008		06:00 - 06:30	0.50	CIRC	1	SPOT ECD SLUG 150 BBL.S OF 15.8 PPG IN OPEN HOLE
	06:30 - 14:00	7.50	TRP	2	TRIP OUT OF TO LOG HOLE	
	14:00 - 06:00	16.00	LOG	1	RUN OPEN HOLE LOGGS, PLAT FORM EXPRESS, OBMI LOG, IN CASING SONIC, NEUTRON LOG IN CASING FROM SHOE TO 5,000' AND GAMMA RAY FROM SHOE TO SURFACE	
	11/8/2008	06:00 - 09:30	3.50	LOG	2	LOG SONIC/
09:30 - 16:00		6.50	TRP	15	TRIP IN HOLE TO SHOE	
16:00 - 17:00		1.00	CIRC	1	CIRCULATE BOTTOMS UP @ SHOE	
17:00 - 19:30		2.50	TRP	15	TRIP IN HOLE TO 16,986	
19:30 - 20:00		0.50	REAM	1	WASH FROM 16,986 TO 17,070 (NO FILL)	
20:00 - 23:30		3.50	CIRC	1	CIRCULATE OUT ECD SLUG AND CONDITION HOLE TO RUN CASING (LOST 70 BBL.S CIRCULATING OUT ECD SLUG @ SLOW PUMP RATE, PUMP TRIP SLUG 75 BBL.S 15.5	
23:30 - 01:00		1.50	TRP	2	TRIP OUT TO CASING SHOE TO LAY DOWN DRILL PIPE HOLE TOOK ONLY 4 BBL.S OF FILL, CHECK FOR FLOW @ 13,900 AND 11950--NO FLOW BOTH TIMES	
01:00 - 04:00		3.00	CIRC	1	RIG UP L/D TRUCK--CHECKED FLOW BEFORE L/D DRILL PIPE, WELL FLOWING 1/4" STREAM, CIRCULATE BOTTOMS UP @ SHOE AND SPOT ECD SLUG(98 BBL.S 15.9PPG)	
04:00 - 04:30		0.50	TRP	3	LAY DOWN 24 JT'S 4" DP (STOP AND CHECK FOR FLOW)	
04:30 - 05:00		0.50	OTH		MONITOR WELL FOR FLOW WELL FLOWING 7 BBL.S HR, FLOW NOT SLOWING DOWN (POSSIBLE BALLONING)	
11/9/2008	05:00 - 06:00	1.00	TRP	1	PICK UP 24 JT'S DRILL PIPE, AND RUN IN HOLE WITH STANDS IN DERRICK	
	06:00 - 06:30	0.50	TRP	1	PICK UP JT'S DRILL PIPE (WELL FLOWING)	
	06:30 - 08:00	1.50	CIRC	1	CIRCULATE BOTTOMS UP @ SHOE (11,963) PEAK GAS 9087 UNITS, 6' FLARE	

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# Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations	
11/9/2008	08:00 - 09:00	1.00	TRP	2	TRIP IN HOLE 27 STANDS (HALF WAY IN OPEN HOLE)	
	09:00 - 10:30	1.50	CIRC	1	CIRCULATE BOTTOMS UP @ 14,561 PEAK GAS 6,945 UNITS, 12' FLARE	
	10:30 - 11:30	1.00	TRP	2	TRIP IN HOLE TO 17,070	
	11:30 - 15:00	3.50	CIRC	1	CIRCULATE BOTTOMS UP AND SPOT ECD SLUG (160 BBL.S 16.0 PPG) PEAK GAS 6,692 UNITS, 6' FLARE	
	15:00 - 17:30	2.50	TRP	2	TRIP OUT TO SHOE TO L/D DRILL PIPE 54 STANDS	
	17:30 - 01:00	7.50	TRP	3	LAY DOWN 4" DRILL PIPE	
	01:00 - 01:30	0.50	OTH		FIX DRILLING LINE RATS NEST ON DRUM	
	01:30 - 03:00	1.50	TRP	2	TRIP IN HOLE 54 STANDS OUT OF DERRICK	
	03:00 - 06:00	3.00	TRP	3	LAY DOWN 4" DRILL PIPE	
	11/10/2008	06:00 - 09:30	3.50	TRP	3	LAY DOWN 4" DRILL PIPE AND BHA
09:30 - 10:30		1.00	OTH		PULL WEAR BUSHING	
10:30 - 12:00		1.50	CSG	1	RIG UP CASING CREW (ROCKY MOUNTAIN)	
12:00 - 21:00		9.00	CSG	2	RUN 4 1/2" CASING TO CASING SHOE 11,	
21:00 - 21:30		0.50	OTH		INSTALL ROTATING HEAD RUBBER	
21:30 - 22:30		1.00	CIRC	1	CIRCULATE BOTTOMS UP @ SHOE	
22:30 - 23:30		1.00	CSG	2	RUN 4 1/2 CASING TO 14,519	
23:30 - 01:00		1.50	CIRC	1	CIRCULATE BOTTOMS UP @ 14,519 BACK GROUND GAS 4835 UNITS, 20' FLARE	
01:00 - 01:30		0.50	OTH		CHANGE OUT PACKER ON FILL TOOL	
01:30 - 03:30		2.00	CSG	2	RUN 4 1/2" CASING TO BOTTOM TAGGED BOTTOM AND LAND CASING 2' OFF BOTTOM 17,068	
11/11/2008	03:30 - 04:30	1.00	CSG	1	RIG DOWN CASING CREW	
	04:30 - 06:00	1.50	CIRC	1	CIRCULATE BOTTOMS UP @ 14,068 @ 30 STRKS, PUMPING SLOW MUD SEEPING	
	06:00 - 07:00	1.00	CIRC	1	CIRCULATE TO CEMENT 4 1/2" CASING	
	07:00 - 07:30	0.50	CSG	1	RIG DOWN CASING FILL TOOL	
	07:30 - 08:00	0.50	CMT	1	HOLD SAFETY MEETING AND RIG UP CEMENTERS/CEMENT HEAD	
	08:00 - 11:30	3.50	CMT	2	CEMENT 4 1/2 " CASING 40 BBL.S 15.0# TUNED SPACER, 222 BBL.S OF MNT "G" 15.2 CEMENT, DISPLACED 240 BBL.S OF CLAY FIX WATER, PLUG BUMPED AND HELD 20 MIN., FLOATS HELD (6.5 BBL.S BACK),	
	11:30 - 12:30	1.00	CMT	1	RIG DOWN CEMENTERS	
	12:30 - 17:00	4.50	BOP	1	PULL DRIP PANS, FLOW LINE, NIPPLE DOWN BOP, PICK UP BOPE LIFT RAILS IN SUB,	
	17:00 - 18:00	1.00	CSG	7	SET SLIPS (220,000# IN SLIPS) ROUGH CUT CASING	
	18:00 - 20:00	2.00	BOP	1	SET BOPE DOWN AND NIPPLE DOWN BOPE, BREAK DOWN FOR RIG MOVE	
11/12/2008	20:00 - 22:30	2.50	OTH		RIG DOWN TOP DRIVE, BREAK ALL CONNECTIONS, L/D DOWN TONGS-ROTARY TOOLS	
	22:30 - 02:30	4.00	BOP	1	RIG UP STRONG BACK TO PICK UP BOPE, TAKE ROTATING HEAD OFF ANNULAR-WELL IS FLOWING 1/4" STREAM-PICK BOPE TO SET PACK OFF SET BOP DOWN, 750 PSI AND BACK SIDE OF 7" CASING	
	02:30 - 06:00	3.50	OTH		RIG DOWN TOP DRIVE AND RIG FLOOR (ROTARY TOOLS)/ MONITORING WELL 750 PSI ON CASING @ 0430 AM, 975 PSI @ 0600 AM	
	06:00 - 12:00	6.00	OTH		RIG DOWN TOP DRIVE RAIL, SERVICE LOOP ON TOP DRIVE, CLEAN AROUND RIG PITS, SHAKERS	
	12:00 - 06:00	18.00	LOC	4	RIG DOWN RIG FLOOR, BRIDLE UP, BREAK LINES APART ON TANKS, PUMPS, PULL CORDS, KOOMY LINES, BREAK FLOW LINE, RAISE CAT-A-LEVER CAT WALK, RIG DOWN TUGGERS, CHOKE LINE, DRAIN CENTRIFACAL PUMPS PULLED FLOOR PLATES. LAYED DN DERRICK, UNSTRUNG BLOCKS. PULL ELECTRICAL LINES AND BREAK LINES. PICK MUD CLEANING EQUIPMENT F/ MUD PITS. CLEANING OBM F/ RIG COMPONENTS. STAGED OUT FUEL TANK, MOTOR PACKAGE, TWO MUD TANKS, HOPPER HOUSE, PARTS HOUSE. ONE BED TRUCK, ONE POLE TRUCK AND ONE CRANE ON LOCATION.	
	11/13/2008	06:00 - 18:00	12.00	LOC	4	

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### Operations Summary Report

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name: UNIT

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Description of Operations
11/13/2008	06:00 - 18:00	12.00	LOC	4	SECOND CRANE AND ROAD TRUCKS DUE ON LOCATION IN THE AM. NOTE: BLED OFF 1,200 PSI FROM BACK SIDE OF CASING, 0 PRESSURE.
	18:00 - 06:00	12.00	LOC	4	WAIT ON DAYLIGHTS
11/14/2008	06:00 - 18:00	12.00	LOC	4	SET DERRICK OFF FLOOR. FINISHED PULLING OUT BACK YARD. STEAM
					CLEANING RIG COMPONENTS. HAULED 13 LOADS T/ MESA. 98% RIGGED DN
	18:00 - 06:00	12.00			WILL UNSTACK SUBS, PULL BOP, AND UN PIN DERRICK TOMORROW WAIT ON DAYLIGHTS

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**Operations Summary Report - COMPLETION**

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name:

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number:

Date	From - To	Hours	Code	Sub Code	Description of Operations
11/18/2008	08:00 - 14:00	6.00	LOG	2	MIRU OWP ELU. MU AND RIH WITH CCL/GR/CBL/VDL LOGGING TOOLS AND TAG CORRELATED PBTD AT 17,046' (FC @ 17,066'). PRESSURE UP TO 4,000 PSI AND LOG UP TO 7,000'. BLEED PRESSURE TO ZERO AND POOH. RDMO ELU. EST. TOC AT 7,700'. BHT= 326*.
11/29/2008	08:00 - 14:00	6.00	PERF	2	SPOT IPS FBE.
11/30/2008	09:00 - 13:00	4.00	PERF	2	MIRU IPS FB AND OWP ELU. MU & RIH WITH 2.5" GUNS. SHOOT 90 HOLES FROM 16,527' TO 17,040'. 500 PSI WHEN GUNS WERE FIRED. 900 PSI WITH GUNS AT SURFACE.
12/1/2008	13:00 - 19:00	6.00	STIM	2	MIRU HES FRAC EQUIPMENT.
	06:00 - 07:30	1.50	STIM	3	FRAC STAGE #1 WITH 1,543 BBLS 35# HYBOR-G CARRYING 52,545 LBS 30/50 TLC AND 28,648 LBS 30/50 SINTERLITE SAND FROM .5 TO 4 PPA. AVG RATE= 47.8 BPM. AVG PSI= 10,106.
	07:30 - 11:50	4.33	PERF	2	STAGE #2. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 16,390' WITH 8,000 PSI. SHOOT 42 HOLES FROM 15,781' TO 16,370'.
	11:50 - 13:15	1.42	STIM	3	FRAC STAGE #2 WITH 2,428 BBLS SLICKWATER CARRYING 30,284 LBS 30/50 TLC AND 13,735 LBS 30/50 SINTERLITE SAND. AVG RATE= 43.6 BPM. AVG PSI = 10,670.
	13:15 - 16:30	3.25	PERF	2	STAGE #3. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 15,690' WITH 8,500 PSI. SHOOT 42 HOLES FROM 14,891' TO 15,665'.
	16:30 - 21:20	4.83	STIM	3	FRAC STAGE #3 WITH 2,223 BBLS SLICKWATER CARRYING 33,817 LBS 30/50 TLC SAND. AVG RATE= 37.4 BPM. AVG PSI= 10,953. SCREENED OUT IN 13 # STAGE. PLACED 17 SKS IN WELLBORE. FLOWED WELL BACK TO CLEAN OUT WELLBORE.
	21:20 - 23:45	2.42	PERF	2	BACK WELL DOWN WITH 220 BBLS STAGE #4. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CBP. SET PLUG AT 14,800' WITH 8,300 PSI. SHOOT 42 HOLES FROM 14,013' TO 14,779'.
	23:45 - 01:15	1.50	STIM	3	FRAC STAGE # 4 WITH 2,522 BBLS SLICKWATER CARRYING 42,501 LBS 30/50 TLC SAND. AVG RATE= 39.5 BPM. AVG PSI = 9,858.
	01:15 - 03:20	2.08	PERF	2	STAGE #5. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 13,920' WITH 7,200 PSI. SHOOT 42 HOLES FROM 13,737' TO 13,898'.
	03:20 - 04:45	1.42	STIM	3	FRAC STAGE # 5 WITH 2,840 BBLS SLICKWATER CARRYING 5,000 LBS 100 MESH & 42,111 LBS 30/50 TLC SAND. AVG RATE= 43.0 BPM. AVG PSI = 9,527.
12/2/2008	04:45 - 07:00	2.25	PERF	2	STAGE #6. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CBP. SET PLUG AT 13,620' WITH 7,000 PSI. SHOOT 42 HOLES FROM 12,842' TO 13,598'.
	07:00 - 08:15	1.25	STIM	3	FRAC STAGE # 6 WITH 2,442 BBLS SLICKWATER CARRYING 22,800 LBS 30/50 WHITE AND 19,300 LBS 30/50 TLC SAND. AVG RATE= 43.3 BPM. AVG PSI = 8,031 .
	08:30 - 10:40	2.17	PERF	2	STAGE # 7 RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 12,730' WITH 5,800 PSI. SHOOT 36 HOLES FROM 12,157' TO 12,704'.
	10:40 - 11:55	1.25	STIM	3	FRAC STAGE #7 WITH 2,477 BBLS SLICKWATER CARRYING 25,600 LBS 30/50 WHITE AND 19,400 LBS 30/50 TLC SAND. AVG RATE= 45.2 BPM. AVG PSI = 6,975.
	11:55 - 13:30	1.58	PERF	2	STAGE #8. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 11,680' WITH 4,900 PSI. SHOOT 33 HOLES FROM 11,318' TO 11,650'.
	13:30 - 15:50	2.33	STIM	3	FRAC STAGE #8 WITH 2,898 BBLS SLICKWATER CARRYING 57,600 LBS 30/50 WHITE AND 17,200 LBS 30/50 TLC SAND. AVG RATE= 46 BPM. AVG PSI = 6,300.
	15:50 - 16:20	0.50	PERF	2	STAGE #9. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CBP. SET PLUG AT 11,264' WITH 3,800 PSI. SHOOT 39 HOLES FROM 10,716' TO 11,230'.
	16:25 - 17:38	1.22	STIM	3	FRAC STAGE #9 WITH 2,887 BBLS SLICKWATER CARRYING 54,000 LBS 30/50 WHITE AND 13,100 LBS 30/50 TLC SAND. AVG RATE= 41 BPM. AVG PSI = 5,660.
17:45 - 19:00	1.25	PERF	2	STAGE #10. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CBP. SET	

**Operations Summary Report**

Well Name: GH 6-20-8-21  
 Location: 20- 8-S 21-E 26  
 Rig Name:

Spud Date: 8/22/2008  
 Rig Release:  
 Rig Number:

Date	From - To	Hours	Code	Sub Code	Description of Operations
12/2/2008	17:45 - 19:00	1.25	PERF	2	PLUG AT 10,455' WITH 3,700 PSI. SHOOT 30 HOLES FROM 10,209' TO 10,435'. FRAC STAGE #10 WITH 2,247 BBLS SLICKWATER CARRYING 35,426 LBS 30/50 WHITE AND 17,529 LBS 30/50 PRC SAND. AVG RATE= 40.5 BPM. AVG PSI = 5,252. STAGE #11. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 9,236' WITH 3,400 PSI. SHOOT 21 HOLES FROM 9,095' TO 9,219'. FRAC STAGE #11 WITH 658 BBLS SLICKWATER CARRYING 25,743 LBS 30/50 WHITE AND 13,808 LBS 30/50 PRC SAND. AVG RATE= 40 BPM. AVG PSI = 6,036. STAGE #12. RU OWP ELU. MU & RIH WITH 2.5" GUNS AND 3.44" CFP. SET PLUG AT 7730' WITH 3,100 PSI. SHOOT 27 HOLES FROM 7,062' TO 7,712'. FRAC STAGE #12 WITH 754 BBLS SLICKWATER CARRYING 38,499 LBS 30/50 WHITE AND 26,020 LBS 20/40 PRC SAND. AVG RATE= 45.0 BPM. AVG PSI = 4,593. RDMO OWP ELU AND HES FRAC EQUIPMENT. MIRU IPS CTU, GCDOE AND SPIRIT FLUIDS. LOAD CT WITH 110" WATER. MU QES 2 7/8" MOTOR/JARS AND 3.55" 5-BLADE JUNK MILL. TEST STACK TO 8,000 PSI. RIH AND DRILL OUT 11 PLUGS IN 6.5 HOURS TO PBDT DEPTH OF 17,066'. PUMP FINAL SWEEP AND POOH. RDMO IPS CTU, GCDOE & SPIRIT FLUIDS. FLOWING TO SALES THROUGH IPS FBE. FLOWING TO SALES THROUGH IPS FBE. RDMO IPS FBE.
	19:17 - 20:30	1.22	STIM	3	
	20:30 - 21:30	1.00	PERF	2	
	21:36 - 21:57	0.35	STIM	3	
	22:05 - 23:05	1.00	PERF	2	
	23:05 - 23:30	0.42	STIM	3	
12/3/2008	23:30 - 03:00	3.50	LOC	4	
	06:00 - 19:30	13.50	DRL	6	
12/4/2008	19:30 - 06:00	10.50	PTST	2	
12/5/2008	19:30 - 06:00	10.50	PTST	2	
12/6/2008	19:30 - 06:00	10.50	PTST	2	
12/7/2008	06:00 - 06:00	24.00	PTST	2	

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0137  
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well  Oil Well  Gas Well  Dry  Other  
 b. Type of Completion:  New Well  Work Over  Deepen  Plug Back  Diff. Reserv.  
 Other: \_\_\_\_\_

5. Lease Serial No.  
UTU-0140740

6. If Indian, Allottee or Tribe Name  
UTE TRIBE

7. Unit or CA Agreement Name and No.  
GYPSUM HILLS

2. Name of Operator  
Questar Exploration & Production Co.

8. Lease Name and Well No.  
GH 6 20-8-21

3. Address 11002 EAST 17500 SOUTH - VERNAL, UT 84078

3a. Phone No. (include area code)  
435.781.4342 - Dahn Caldwell

9. AFI Well No.  
43-047-38662

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

At surface 1956' FNL, 1688' FWL, SENW, SEC 20-T8S-R21E

At top prod. interval reported below  
1956' FNL, 1688' FWL, SENW, SEC 20-T8S-R21E

At total depth 1956' FNL, 1688' FWL, SENW, SEC 20-T8S-R21E

10. Field and Pool or Exploratory  
Gypsum Hills

11. Sec., T., R., M., on Block and  
Survey or Area Sec 20-T8S-R21E

12. County or Parish  
UINTAH

13. State  
UT

14. Date Spudded  
08/22/2008

15. Date T.D. Reached  
11/05/2008

16. Date Completed 12/03/2008  
 D & A  Ready to Prod.

17. Elevations (DF, RKB, RT, GL)\*  
4708' KB

18. Total Depth: MD 17,070'  
TVD

19. Plug Back T.D.: MD 17,066'  
TVD

20. Depth Bridge Plug Set: MD N/A  
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
COMP NEUTRON/3 DETECTOR LITHO, CBL, ACOUSTIC CB/GR/CCL/TEMP

22. Was well cored?  No  Yes (Submit analysis)  
 Was DST run?  No  Yes (Submit report)  
 Directional Survey?  No  Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17-1/2"	13-3/8"	68#		510'		500 SXS		SURF - CIRC	
12-1/4"	9-5/8"	47#		5,439'		1,985 SXS		SURF - UNK	
8-1/2"	7"	26#/29#		11,983'		1,285 SXS		SURF - UNK	
6-1/8"	4-1/2"	15.1/16.6		17,068'		750 SXS		7,700' - LOG	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
N/A		N/A						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) SEE ATTACHMENT ONE			SEE ATTACHMENT ONE			
B)						
C)						
D)						

26. Perforation Record

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
SEE ATTACHMENT ONE	SEE ATTACHMENT ONE

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
12/3/08	12/7/08	24	→	0	4,418	1,699			FLOWING
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
30/64	N/A	1,270	→					PRODUCING	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

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\*(See instructions and spaces for additional data on page 2)

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28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas (Solid, used for fuel, vented, etc.)  
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
GREEN RIVER	2375'			MANCOS 'B'	12995'
MAHOGAN Y	3347'			FRONTIER	15780'
WASATCH	6010'			DAKOTA SILT	16701'
MESA VERDE	9185'			DAKOTA	16906'
CASTLEGATE	11767'				
BLACK HAWK	12071'				
MANCOS	12511'				

32. Additional remarks (include plugging procedure):

FUTURE OIL PROSPECTS - GREEN RIVER & MAHOGAN Y

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- Electrical/Mechanical Logs (1 full set req'd.)     
  Geologic Report     
  DST Report     
  Directional Survey  
 Sundry Notice for plugging and cement verification     
  Core Analysis     
 Other: PERFORATION & FRACING REPORT

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) JIM SIMONTON Title COMPLETION SUPERVISOR  
 Signature *Jim Simonton (df)* Date 02/03/2009

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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**GH 6 20-8-21 – ATTACHMENT ONE  
PERFORATION DETAIL:**

<u>Open Perfs</u>	<u>Stimulation</u>					<u>Perf Status</u>
7062' – 7063'	Frac w/	64,519	Lbs in	31,668	Gals	Open - Wasatch
7078' – 7079'						Open - Wasatch
7087' – 7088'						Open - Wasatch
7096' – 7097'						Open - Wasatch
7220' – 7221'						Open - Wasatch
7225' – 7226'						Open - Wasatch
7367' – 7368'						Open - Wasatch
7370' – 7371'						Open - Wasatch
7711' – 7712'						Open - Wasatch
9095' – 9096'	Frac w/	39,551	Lbs in	27,636	Gals	Open - Wasatch
9114' – 9115'						Open - Wasatch
9165' – 9166'						Open - Wasatch
9176' – 9177'						Open - Wasatch
9200' – 9201'						Open - Wasatch
9206' – 9207'						Open - Wasatch
9218' – 9219'						Open - Wasatch
10209' – 10210'	Frac w/	52,955	Lbs in	94,374	Gals	Open - LMV
10218' – 10219'						Open - LMV
10224' – 10225'						Open - LMV
10282' – 10283'						Open - LMV
10290' – 10291'						Open - LMV
10314' – 10315'						Open - LMV
10332' – 10333'						Open - LMV
10426' – 10427'						Open - LMV
10430' – 10431'						Open - LMV
10434' – 10435'						Open - LMV
10716' – 10717'	Frac w/	67,100	Lbs in	121,254	Gals	Open - LMV
10758' – 10759'						Open - LMV
10764' – 10765'						Open - LMV
10768' – 10769'						Open - LMV
10840' – 10841'						Open - LMV
10846' – 10847'						Open - LMV
10886' – 10887'						Open - LMV
11078' – 11079'						Open - LMV
11090' – 11091'						Open - LMV
11098' – 11099'						Open - LMV
11216' – 11217'						Open - LMV
11220' – 11221'						Open - LMV
11229' – 11230'	Open - LMV					

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11318' - 11319'	}	Frac w/	74,800	Lbs in	121,716	Gals	Open - LMV
11328' - 11329'							Open - LMV
11360' - 11361'							Open - LMV
11383' - 11384'							Open - LMV
11468' - 11469'							Open - LMV
11536' - 11537'							Open - LMV
11549' - 11550'							Open - LMV
11610' - 11611'							Open - LMV
11616' - 11617'							Open - LMV
11624' - 11625'							Open - LMV
11649' - 11650'	Open - LMV						
12157' - 12159'	}	Frac w/	45,000	Lbs in	104,034	Gals	Open - Blackhawk
12225' - 12227'							Open - Blackhawk
12260' - 12262'							Open - Blackhawk
12329' - 12330'							Open - Blackhawk
12442' - 12443'							Open - Blackhawk
12515' - 12516'							Open - Mancos
12597' - 12598'							Open - Mancos
12702' - 12704'							Open - Mancos
12842' - 12844'	}	Frac w/	42,100	Lbs in	102,564	Gals	Open - Mancos
12955' - 12956'							Open - Mancos
13039' - 13043'							Open - Mancos
13089' - 13091'							Open - Mancos
13306' - 13307'							Open - Mancos
13403' - 13405'							Open - Mancos
13596' - 13598'							Open - Mancos
13737' - 13738'	}	Frac w/	47,111	Lbs in	119,280	Gals	Open - Mancos
13756' - 13758'							Open - Mancos
13779' - 13783'							Open - Mancos
13816' - 13818'							Open - Mancos
13846' - 13848'							Open - Mancos
13879' - 13881'							Open - Mancos
13897' - 13898'							Open - Mancos
14013' - 14014'	}	Frac w/	42,501	Lbs in	105,924	Gals	Open - Mancos
14117' - 14118'							Open - Mancos
14198' - 14199'							Open - Mancos
14286' - 14288'							Open - Mancos
14406' - 14407'							Open - Mancos
14458' - 14459'							Open - Mancos
14507' - 14509'							Open - Mancos
14586' - 14587'							Open - Mancos
14656' - 14658'							Open - Mancos
14777' - 14779'	Open - Mancos						

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14891' – 14892'	}						Open - Mancos
15024' – 15025'							Open - Mancos
15096' – 15098'							Open - Mancos
15228' – 15230'							Open - Mancos
15290' – 15292'		Frac w/	33,817	Lbs in	93,366	Gals	Open - Mancos
15446' – 15450'							Open - Mancos
15582' – 15583'							Open - Mancos
15664' – 15665'							Open - Mancos
15781' – 15782'	}						Open - Frontier
15801' – 15803'							Open - Frontier
15922' – 15924'							Open - Frontier
16008' – 16010'							Open - Frontier
16097' – 16099'		Frac w/	44,019	Lbs in	101,976	Gals	Open - Frontier
16185' – 16186'							Open - Frontier
16268' – 16270'							Open - Frontier
16368' – 16370'							Open - Frontier
16527' – 16532'	}						Open - Frontier
16712' – 16716'							Open - Dakota Silt
16789' – 16790'							Open - Dakota
16909' – 16919'		Frac w/	81,193	Lbs in	64,806	Gals	Open - Dakota
16949' – 16951'							Open - Dakota 'C'
17032' – 17040'							Open - Dakota 'C'

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State of Utah  
Division of Oil, Gas and Mining

OPERATOR ACCT. No. N-5085

OPERATOR: **Questar Exploration & Production Co.**  
ADDRESS: **11002 East 17500 South**  
**Vernal, Utah 84078 (435)781-4342**

ENTITY ACTION FORM - FORM 6

Action Code	Current Entity No.	New Entity No.	API Number	Well Name	QQ	SC	TP	RG	County	Spud Date	Effective Date
E	17041	17041	43-047-38662	GH 6-20-8-21	SENW	20	8S	21E	Uintah	8/22/08	12/3/08

WELL 1 COMMENTS: WMMFD 2/17/08

--	--	--	--	--	--	--	--	--	--	--	--

WELL 2 COMMENTS:

--	--	--	--	--	--	--	--	--	--	--	--

WELL 3 COMMENTS:

--	--	--	--	--	--	--	--	--	--	--	--

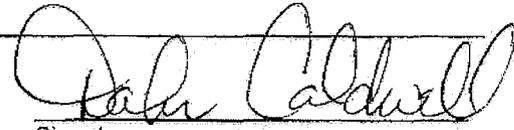
WELL 4 COMMENTS:

--	--	--	--	--	--	--	--	--	--	--	--

WELL 5 COMMENTS:

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)



Signature  
Office Administrator 2/17/2009  
Title Date

Phone No. (435)781-4342

NOTE: Use COMMENT section to explain why each Action Code was selected

(3/89)

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**FEB 17 2009**

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DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**CONFIDENTIAL**

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

5. Lease Serial No. **UTU-0140740**  
6. If Indian, Annotee or Tribe Name  
**UTE TRIBE**

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on page 2.**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		7. If Unit of CA/Agreement, Name and/or No. N/A
2. Name of Operator <b>QUESTAR EXPLORATION &amp; PRODUCTION CO.</b> CONTACT: Mike Stahl		8. Well Name and No. <b>GH 6-20-8-21</b>
3a. Address 11002 EAST 17500 SOUTH, VERNAL, UTAH 84078	3b. Phone No. (include area code) (303) 308-3613	9. API Well No. 43-047-38662
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1956' FNL 1688' FWL, SENW, SECTION 20, T8S, R21E		10. Field and Pool or Exploratory Area GYPSUM HILL
		11. Country or Parish, State UINTAH, UTAH

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>COMMINGLING</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

In Compliance with the Administrative Utah code for drilling and operating practice R649-3-22, completion into two or more pools. Questar Exploration & Production Company hereby requests the commingling of production between intervals in the GH 6-20-8-21. Questar considers this commingling to be in the public interest in that it promotes maximum ultimate economic recovery, prevents waste, provides for orderly and efficient production of oil and gas and presents no detrimental effects from commingling the gas streams.

Questar requests approval for the commingling of production from the Dakota to the Wasatch intervals. Based upon offset production logs, the proposed initial allocation is as follows: Dakota - 10%; Mancos - 40%; Mesa Verde - 40%; Wasatch - 10%.

On an annual basis the gas will be sampled and a determination will be made of the BTU content and gas constituents. These annual samples can be used to determine if the gas allocation is changing over time. If these samples do not indicate that any adjustments in allocation are necessary they may be discontinued after the fifth anniversary of the initial production.

**COPY SENT TO OPERATOR**

Date: 4.14.2009

Initials: KS

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) <b>Laura Bills</b>	Title Associate Regulatory Affairs Analyst
Signature <i>Laura Bills</i>	Date 03/12/2009

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

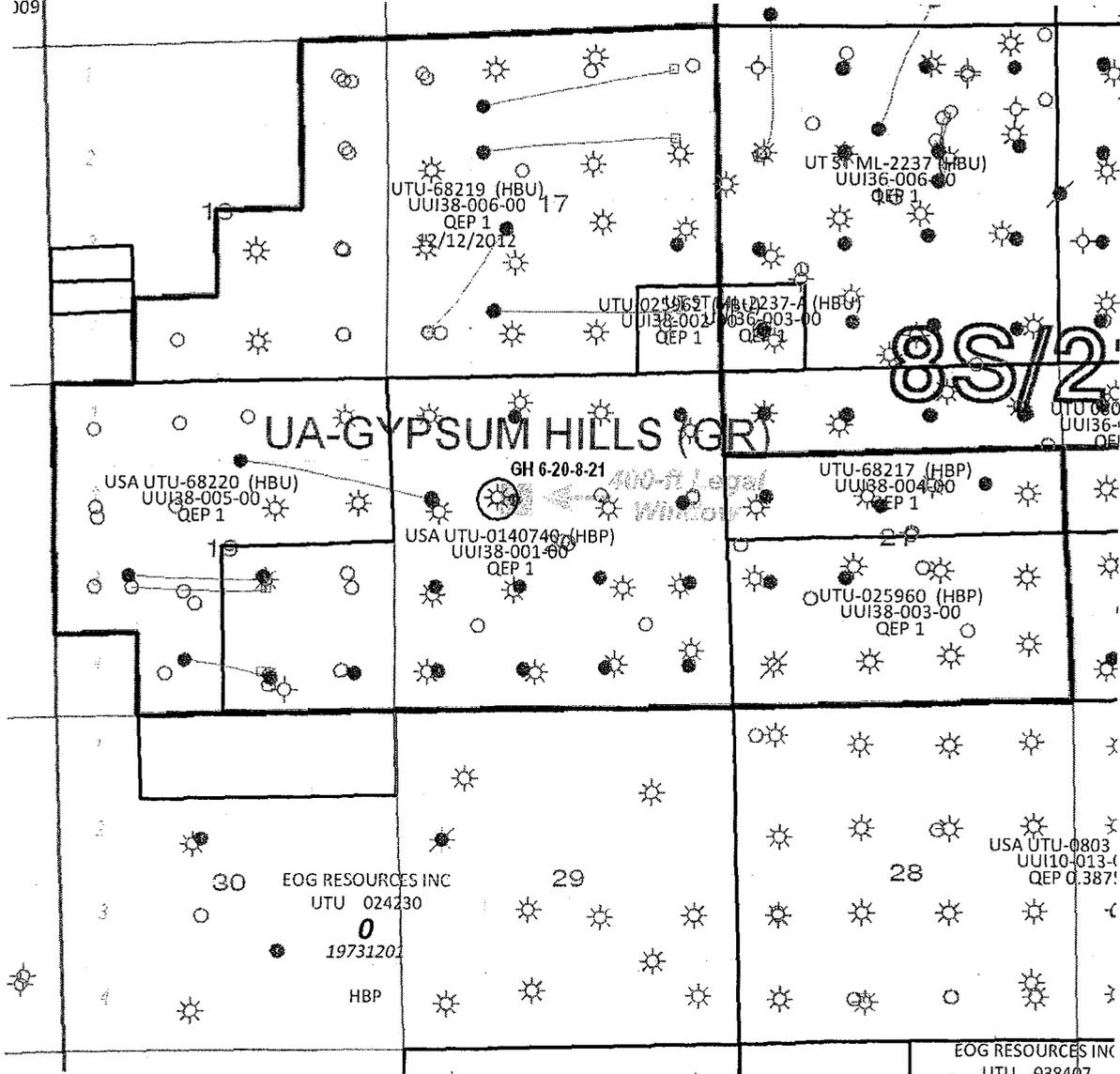
Approved by <i>[Signature]</i>	Title <b>Pet Eng.</b>	Date <b>4/13/09</b>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office <b>DOGM RECEIVED</b>	Federal Approval Of This Action Is Necessary

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**MAR 16 2009**



1091



# UA-GYPSUM HILLS (GR)

## T8S-R21E

○ Commingled well

<b>Tw/Kmv</b>	
<b>COMMINGLED PRODUCTION</b>	
Uinta Basin—Uintah County, Utah	
<b>Well: GH 6-20-8-21</b>	
<b>Lease: UTU 0140740</b>	
<b>QUESTAR</b> Exploration and Production <small>1050 17th St., # 500 Denver, CO 80265</small>	Geologist:
	Landman: Nate Koeniger/Chad Matney/Birgit Roesink
	Date: February 17, 2009

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET (for state use only)**

**ROUTING**  
**CDW**

Change of Operator (Well Sold)

**X - Operator Name Change**

The operator of the well(s) listed below has changed, effective:

**6/14/2010**

<b>FROM: (Old Operator):</b> N5085-Questar Exploration and Production Company 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 308-3048	<b>TO: ( New Operator):</b> N3700-QEP Energy Company 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 308-3048
--	---

CA No.		Unit:		GYPSUM HILLS (GRRV)				
WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED								

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/28/2010
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/28/2010
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 6/24/2010
- Is the new operator registered in the State of Utah: Business Number: 764611-0143
- (R649-9-2) Waste Management Plan has been received on: Requested
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 8/16/2010 BIA not yet
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 8/16/2010
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 6/29/2010

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 6/30/2010
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 6/30/2010
- Bond information entered in RBDMS on: 6/30/2010
- Fee/State wells attached to bond in RBDMS on: 6/30/2010
- Injection Projects to new operator in RBDMS on: 6/30/2010
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 965010693
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965010695
- The **FORMER** operator has requested a release of liability from their bond on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS:**

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER See attached
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: See attached
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7. UNIT or CA AGREEMENT NAME: See attached
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: See attached
2. NAME OF OPERATOR: Questar Exploration and Production Company <i>N5085</i>		9. API NUMBER: Attached
3. ADDRESS OF OPERATOR: 1050 17th Street, Suite 500 CITY: Denver STATE: CO ZIP: 80265	PHONE NUMBER: (303) 672-6900	10. FIELD AND POOL, OR WILDCAT: See attached
4. LOCATION OF WELL FOOTAGES AT SURFACE: See attached		COUNTY: Attached
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		STATE: UTAH

11 CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>6/14/2010</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Operator Name Change</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective June 14, 2010 Questar Exploration and Production Company changed its name to QEP Energy Company. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:  
 Federal Bond Number: 965002976 (BLM Reference No. ESB000024) *N3700*  
 Utah State Bond Number: ~~965003033~~ *965010695*  
 Fee Land Bond Number: ~~965003033~~ *965010695*  
 BIA Bond Number: ~~799446~~ *965010693*

The attached document is an all inclusive list of the wells operated by Questar Exploration and Production Company. As of June 14, 2010 QEP Energy Company assumes all rights, duties and obligations as operator of the properties as described on the list

NAME (PLEASE PRINT) <u>Morgan Anderson</u>	TITLE <u>Regulatory Affairs Analyst</u>
SIGNATURE <i>Morgan Anderson</i>	DATE <u>6/23/2010</u>

(This space for State use only)

**RECEIVED**  
JUN 28 2010  
DIV. OF OIL, GAS & MINING

(See Instructions on Reverse Side)

**APPROVED** 6/30/2009  
*Earlene Russell*  
Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician

(5/2000)

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
 GYPSUM HILLS (GRRV)  
 effective June 14, 2010

well_name	sec	twp	rng	api	entity	mineral lease	type	stat	C
GH 4	19	080S	210E	4304730028	5355	Federal	OW	P	
GH 1-19	19	080S	210E	4304731065	5355	Federal	OW	P	
GH 23-21	21	080S	210E	4304731541	5355	Federal	OW	P	
GH 4-21	21	080S	210E	4304731826	5355	Federal	OW	P	
GH 5-21	21	080S	210E	4304731827	5355	Federal	OW	P	
GH 9	20	080S	210E	4304732304	5355	Federal	OW	DRL	C
GH 11	20	080S	210E	4304732459	5355	Federal	OW	P	
GH 13	21	080S	210E	4304732460	5355	Federal	OW	P	
GH 14	20	080S	210E	4304732647	5355	Federal	OW	P	
GH 18	20	080S	210E	4304732650	5355	Federal	OW	P	
GH 19	20	080S	210E	4304732651	5355	Federal	OW	P	
GH 20	20	080S	210E	4304732652	5355	Federal	OW	P	
GH 16	20	080S	210E	4304732675	5355	Federal	OW	P	
GH 10W-19-8-21	19	080S	210E	4304733528	12736	Federal	GW	P	
GH 10G-19-8-21	19	080S	210E	4304733566	5355	Federal	OW	P	
WV 11W-17-8-21	17	080S	210E	4304733912	13228	Federal	GW	P	
WV 5W-17-8-21	17	080S	210E	4304733954	13332	Federal	GW	P	
WV 7W-17-8-21	17	080S	210E	4304733956	13330	Federal	GW	P	
GH 9W-17-8-21	17	080S	210E	4304734150	13392	Federal	GW	P	
GH 16W-17-8-21	17	080S	210E	4304734156	13354	Federal	GW	P	
WVX 10W-17-8-21	17	080S	210E	4304734561	13744	Federal	GW	P	
GHX 15W-17-8-21	17	080S	210E	4304734562	13674	Federal	GW	P	
GHX 13HG-17-8-21	17	080S	210E	4304734723	5355	Federal	OW	P	
GH 1G-17-8-21	17	080S	210E	4304734927	5355	Federal	OW	P	
WVX 2W-17-8-21	17	080S	210E	4304734928	14253	Federal	GW	P	
WVX 8W-17-8-21	17	080S	210E	4304734929	13792	Federal	GW	P	
GH 4MU-20-8-21	20	080S	210E	4304735068	14213	Federal	GW	P	
GH 13MU-20-8-21	20	080S	210E	4304735070	14817	Federal	GW	P	
GH 5W-20-8-21	20	080S	210E	4304735097	14557	Federal	GW	P	
WVX 3MU-17-8-21	17	080S	210E	4304735318	14113	Federal	GW	P	
GH 15ML-18-8-21	18	080S	210E	4304735323	15483	Federal	GW	P	
GH 1ML-19-8-21	19	080S	210E	4304735324	14824	Federal	GW	P	
WVX 14MU 17-8-21	17	080S	210E	4304735369	14098	Federal	GW	P	
WVX 12MU-17-8-21	17	080S	210E	4304735370	15108	Federal	GW	P	
WVX 8MU-19-8-21	19	080S	210E	4304735372	14241	Federal	GW	P	
GH 10ML-18-8-21	18	080S	210E	4304735391	15482	Federal	GW	P	
GH 8G-17-8-21	17	080S	210E	4304737992	5355	Federal	OW	P	
GH 16G-17-8-21	17	080S	210E	4304737993	5355	Federal	OW	P	
GH 8G-18-8-21	18	080S	210E	4304738661		Federal	GW	APD	C
GH 6-20-8-21	20	080S	210E	4304738662	17041	Federal	GW	P	

Bonds: BLM = ESB000024  
 BIA = 956010693  
 State = 965010695



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155  
<http://www.blm.gov/ut/st/en.html>



IN REPLY REFER TO:  
3100  
(UT-922)

JUL 28 2010

### Memorandum

To: Vernal Field Office, Price Field Office, Moab Field Office

From: Chief, Branch of Minerals

*Roy L. Bankart*

Subject: Name Change Recognized

Attached is a copy of the Certificate of Name Change issued by the Texas Secretary of State and a decision letter recognizing the name change from the Eastern States Office. We have updated our records to reflect the name change in the attached list of leases.

The name change from **Questar Exploration and Production Company** into **QEP Energy Company** is effective June 8, 2010.

cc: MMS  
UDOGM

RECEIVED

AUG 16 2010

DIV. OF OIL, GAS & MINERALS